CANADA

and

INTERNATIONAL

CARTELS

An Inquiry into the Nature
and Effects of International Cartels and
other Trade Combinations

REPORT OF COMMISSIONER, COMBINES INVESTIGATION ACT
OTTAWA, OCTOBER TENTH, NINETEEN FORTY-FIVE

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EDMOND CLOUTIER
PRINTER TO THE KING'S MOST EXCELLENT MAJESTY
1945

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49254—1

CONTENTS

	Page
Letter of Transmittal	v
Terms of Reference	viii
I. Nature of International Trade Combinations	1
1. Examples of Cartel Arrangements affecting Canadian Import Commodities	2
Fertilizers: Potash, Nitrogen, Phosphorus	3
Tanning Materials: Quebracho	7
Flat Glass	8
Sulphur	10
Dyestuffs	11
Tools—Cemented Tungsten Carbide	13
Magnesia Refractories	15
Titanium Pigments	16
2. Examples of Cartel Arrangements Restricting Canadian Manufacturers to Home Market on Exclusive Basis	18
Chemicals	19
Soda Ash	21
Electric Lamps	22
Radio Tubes and Sets	23
Matches	24
3. Examples of Cartel Arrangements involving Participation by Canadian Exporters	25
Base Metals: Copper, Lead, Zinc, Nickel	26
Steel	31
Aluminum	34
Acetic Acid	35
Radium	36
Newsprint	37
II. International Affiliations of Canadian Companies	41
III. The Relation of Patents to Cartels and Combines	45
IV. The Need for an Effective Policy	54
International Cartels	54
Domestic Combinations and Monopolies	56
V. Current Proposals for the Control of Cartels	60
VI. Conclusions and Recommendations	65
Appendix—Form of letter requesting information from Canadian manufacturing and trading firms	71

49254—1½

REPORT TO THE MINISTER OF JUSTICE

COMBINES INVESTIGATION COMMISSION
DEPARTMENT OF JUSTICE
OTTAWA

October 10, 1945.

Honourable LOUIS S. ST. LAURENT, K. C.,
Minister of Justice,
Ottawa.

SIR.—I have the honour to transmit to you herewith the report of an inquiry into international trade combinations, including international patent arrangements, which has been made on direction of the Minister of Labour[1], a copy of whose letter of instructions of May 22, 1944, is attached. The objective of the study as therein indicated has not been to secure evidence of alleged offences, but to secure basic information about private trade combinations, particularly international combinations, in relation to Canadian trade and employment, the nature of their activities and the measures which exist or which should be provided in order to safeguard the public interest. The study has therefore proceeded along the following lines indicated in the letter of instructions:

> Study the nature and operations of international trade combinations in relation to Canadian interests and the measures which exist for their control. Such a study would include international patent arrangements. The committee should endeavour to find out to what extent policies followed by such trade combinations have affected employment or the operations of business enterprises in Canada or may affect them in the future. Attention should also be given to the effects of such arrangements on Canadian import and export trade and possible effects in the post-war period.
>
> Study the extent to which activities of such international trade combinations are affected by existing Canadian legislation and what further measures may be necessary to safeguard the public interest. In this phase of the study consideration should be given to the possibilities of international collaboration in the control of cartels.
>
> Study the relationships that may exist between international and domestic trade combinations, and make recommendations of necessary changes in existing legislation affecting combinations of either type.

The most extensive information relating to the operations of international cartels is to be found in the hearings of United States Congressional committees, particularly the Temporary National Economic Committee, the Bone Committee on Patents and the Kilgore Subcommittee on War Mobilization and in the complaints and indictments filed by the United States Department of Justice. More recently future public policy of the United States with respect to cartels has been considered by the House Special Committee on Post-War Economic

(1) The Minister of Labour was charged with the administration of the Combines Investigation Act until October 1, 1945, when this responsibility was transferred to the Minister of Justice by Order in Council P.C. 6206, dated September 25, 1945, under authority of the Public Service Re-arrangement and Transfer of Duties Act.

Policy and Planning and in the joint sessions of the senate committees under the chairmanship of Senator J. C. O'Mahoney. These intensive inquiries in the United States have, of course, been directed for the purpose of securing information relating to the interest of that country from the viewpoint of national security or economic welfare. It has not been considered necessary in the present inquiry, nor would it have been possible, to attempt to test the accuracy of the information and conclusions presented as a result of the investigations in the United States. For the purposes of this study such findings are not taken as conclusive, although it is recognized that they have been made by responsible governmental bodies in another country and should be given due consideration. Such information may be more significant in the case of Canada than of some other countries because of the close financial and economic relationships between business enterprises in the two countries. Industrial life in Canada has been so closely patterned after that of the United States and inter-corporate tie-ups between the two countries have been established on such an extensive scale that it has been considered important to examine with particular care those references in United States reports which indicated any phases of international cartel operations which have relation to this country. For these reasons examination was first made of the results of the investigations in the United States, so far as these have been made public, and other reports and private studies relating to international cartels including those prepared under the auspices of the League of Nations. Information obtained in inquiries under the Combines Investigation Act, by the Tariff Board and by the Price Spreads Commission of 1935 has also been studied where it related to private international trade agreements or patent agreements. In addition we have had the advantage of discussions with officials of various government departments of the United States and the United Kingdom who have been concerned with cartel problems.

The information obtained from the sources mentioned above, while it threw a good deal of light on international cartel operations which affected Canada prior to the war, was not sufficient, in its direct bearing on Canadian industry and trade, to serve as a basis for reaching conclusions as to possible lines of public policy with respect to cartels. It was considered desirable therefore to request information directly from Canadian firms and individuals who might have knowledge of the operations of cartels in relation to Canadian trade and who could speak of the effects of such arrangements on our domestic and foreign trade. It was clear that it would not be possible to canvass all manufacturing and trading firms in Canada. There are approximately eight thousand manufacturing firms listed in the Canadian Trade Index and there are also a large number of trading firms even if only those are considered who are most closely connected with importing or exporting. For this phase of the inquiry a letter requesting information, a copy of which is appended to the report, was sent to approximately three hundred manufacturing and trading firms who it was considered might be in a position to supply information on private international trade agreements. Information was also sought from co-operative and labour organizations and from the Canadian Chamber of Commerce, the Canadian Manufacturers' Association, the Patent Institute of Canada, the Canadian Importers and Traders Association, and others. These requests for information were given careful attention by individuals and organizations and a large number of useful submissions were received in reply.

It was not considered necessary for the purposes of this study to conduct examinations of company officials, to call for the production of business records, or to make detailed examination of the full text of the international agreements which were referred to in the replies received. Most of the firms directly concerned with such agreements gave statements describing and interpreting them without submitting the actual text.

This study was undertaken initially by the Commissioner of the Combines Investigation Act in association with Dr. W. A. Mackintosh, Mr. J. J. Deutsch, Mr. J. C. McRuer, K.C., now Mr. Justice McRuer of the Supreme Court of Ontario, and Professor V. W. Bladen of the University of Toronto. Shortly afer the submission of an interim report on November 10, 1944, Mr. J. J. Deutsch of the Department of External Affairs withdrew from government service and Mr. J. A. Chapdelaine of the same department then became associated with the inquiry as well as Mr. G. D. Mallory of the Department of Trade and Commerce. Special assistance with particular phases of the inquiry was given by Mr. John Willis of Osgoode Hall Law School and Professor B. S. Keirstead of McGill University. Mr. A. S. Whiteley of the staff of the Combines Investigation Commission has served as executive secretary throughout the inquiry.

The present report summarizes the factual material which has been examined during the inquiry and its relation to the Canadian economy. The main conclusions and recommendations are presented in Chapter VI and these are concurred in by those who have been authorized to take part in the inquiry.

Yours faithfully,

F. A. McGREGOR
Commissioner, Combines Investigation Act.

TERMS OF REFERENCE

MINISTER OF LABOUR
CANADA

OTTAWA, May 22, 1944.

Dear Mr. McGREGOR—Problems relating to international trade combinations such as international cartels and international patent arrangements have assumed great significance because of the possible effect of such arrangements on employment and domestic and foreign trade. Already international discussions on the expert level have brought forward proposals on which we are not as yet in a position to give an informed judgment. No comprehensive study has been made in Canada of the various aspects of the problems involved and no steps have been taken to assemble information which will be necessary before sound conclusions can be reached. Questions in regard to international trade combinations are continually being raised and no time should be lost in gathering adequate information as to the character and activities of international trade combinations and in considering possible measures of control.

As there is no legislation in Canada which applies to international cartels as such it is highly desirable that study be given in advance to existing Canadian legislation in regard to trade combinations in their general aspects and to what further measures might be adopted to deal specifically with international trade combinations.

Preliminary discussions on the relationship of cartel problems to other post-war economic problems have already taken place with officers of the Department of External Affairs, members of the Advisory Committee on Economic Policy and others. Dr. W. C. Clark and Dr. W. A. Mackintosh, Chairman and Vice Chairman of the Advisory Committee, have recommended that the necessary inquiries should be made without delay. I think they should be made under the general direction of yourself as Commissioner of the Combines Investigation Act in consultation with Dr. Mackintosh and Mr. J. J. Deutsch of the Department of External Affairs with such assistance as may be found necessary. In this connection I approve the suggestion that Mr. J. C. McRuer, K.C., of Toronto, and Professor V. W. Bladen, of the University of Toronto, should be retained. I am writing to Mr. St. Laurent today to ask if he will make Mr. McRuer's services available. With these arrangements I hope it will be possible to proceed with the work with as little delay as possible.

What is here suggested is a study rather than a public inquiry. Its objective should be to secure basic information on which suitable government policy might later be based and in this respect would be in contrast to specific investigations undertaken to secure evidence of alleged offences. At various stages in the course of the inquiry it would be desirable to discuss with members of the Economic Advisory Committee the information obtained and recommendations suggested. In general I suggest that the study might proceed along the following lines:

Study the nature and operations of international trade combinations in relation to Canadian interests and the measures which exist for their control. Such a study would include international patent arrangements. The committee should endeavour to find out to what extent policies followed by such trade combinations have affected employment or the operations of business enterprises

in Canada or may affect them in the future. Attention should also be given to the effects of such arrangements on Canadian import and export trade and possible effects in the post-war period.

Study the extent to which activities of such international trade combinations are affected by existing Canadian legislation and what further measures may be necessary to safeguard the public interest. In this phase of the study consideration should be given to the possibilities of international collaboration in the control of cartels.

Study the relationships that may exist between international and domestic trade combinations, and make recommendations of necessary changes in existing legislation affecting combinations of either type.

Yours very truly,

HUMPHREY MITCHELL.

F. A. McGregor, Esq.,
Commissioner, Combines Investigation Act,
Department of Labour,
Ottawa.

I

NATURE OF INTERNATIONAL TRADE COMBINATIONS

This study of the broad aspects of international trade combinations, including patent arrangements, has not followed any narrow definition of international cartel but has included attempts to restrict competition on an international scale, whether resulting from private business agreements or inter-corporate, patent licensing or other restrictive arrangements, all of which have come to be referred to loosely as cartels.

Consideration has not been given to what are currently described as "intergovernmental commodity agreements" even though some of these, in the past, have been indistinguishable, in their restrictive effects, from private cartel arrangements and even though the line between state and private agreements is sometimes hard to draw. Whatever the circumstances and effects of intergovernmental agreements, they are a matter of joint state action and are subject to conditions imposed by national authority which presumably has the public interest and national welfare as its first consideration. This is not the case with arrangements privately made among business firms which, if they sometimes serve the public interest, do so incidentally, not as a part of their principal objectives. Such intergovernmental control arrangements affect tin, natural rubber, tea, coffee, sugar, wheat, et cetera. These are beyond the terms of reference of this study and are not discussed. Some mention is made of quasi-governmental participation in cartel agreements which have involved support or action by individual states as part of the national organization leading to the international cartel.

International cartels rest upon and arise out of national monopolistic organizations. A few examples of international business arrangements can be found at early stages of modern industrial development but the rapid spread of private international agreements took place between 1919 and 1939. The tendency toward concentration of industrial enterprise which appeared in one industry after another as large-scale operations became established and capital requirements increased was well in evidence before the first World War. The stimulation to industrial expansion during World War I was felt in many countries most particularly by the growing combines which, in many cases, emerged from the war as full-fledged industrial giants. Integration, often described as rationalization, was characteristic of large-scale industry in this period and this increased the possibility of intense competition in international trade as consolidated national groups became trade rivals. On the whole, governments tended to be tolerant of the growth of these industrial empires and, in many cases, national encouragement or approval was given to them. Many factors influenced the trend of governmental and business attitudes. Concentration of production on national lines facilitated arrangements among business groups while the potential intensity of competition made them ready to seek alternatives. The over-hang of surplus products or surplus capacity from the war period created unstable conditions in a number of major fields. The speeding up of technological progress further increased the possibilities of surplus goods at a time when international trading conditions limited the development of adequate demands by consuming countries. Depression on a world-wide scale, along with strategic considerations and the general growth of economic nationalism, frequently led to the stimulation of high-cost production and the shielding of high-cost producers from foreign competition.

49254 2½

There are a number of ways in which private international business agreements may be classified. On the basis of form of organization they could be classified as trade associations, international combines, holding companies and so on. According to the nature of the products controlled they could be grouped as raw materials, industrial products, or finished consumer goods. One might also distinguish international cartels on the basis of those facilitated by patent or trade-mark agreements and those dealing with non-patented or trade-marked goods. For the purposes of this study the following classification of private international agreements has been used:—

(1) Those affecting commodities for which Canada is dependent wholly or in large part on importations. Examples of this class are fertilizers, flat glass, tanning materials.

(2) Those giving Canadian manufacturers exclusive enjoyment of the home market but which bar them from exporting to other markets. Examples of this class are certain chemicals, electrical products, matches.

(3) Those involving participation by Canadian exporters in the cartel arrangements. Examples of this class are copper, lead, zinc, aluminum, certain paper products.

A situation not covered by the above classification is one where there is active competition between Canadian producers and a cartel outside Canada. Such a situation is usually short-lived, for either the Canadian producers are in a strong enough position to upset the cartel arrangement or they are forced by pressure or persuasion to come to terms with it, in which case the arrangement falls into class (2) or (3).

The restrictive practices followed by international cartels are similar in character to those engaged in by domestic trade combinations. In fact, the agreements are in most cases made effective through the actions of domestic combinations or monopolies. Without attempting any analysis of the effects of particular practices or the circumstances in which they are agreed upon or applied, the following may be listed as typical forms of restrictive action engaged in by cartels: fixing of uniform prices, establishment of standard discounts or classes of customers, allocation of territorial markets, fixing of maximum sales or production quotas, limitation of exports or imports, limitation of the establishment of additional productive capacity or the introduction of new products, exclusive exchange of patents, setting up exclusive selling agencies or exclusive dealers.

1. Examples of Cartel Arrangements affecting Canadian Import Commodities

International cartel arrangements affect a number of Canada's leading imports, as well as other products which, while not ranking as high in value, are of importance from the viewpoint of health or industrial efficiency. Although cartel arrangements in relation to imports may be thought of primarily as affecting the cost of goods we need to buy abroad, there are other aspects of no less significance. The cartel agreement may allot the Canadian market to certain groups, as was done in the case of fertilizer nitrogen and plate glass, by private arrangement among the parties with no opportunity of decision by Canada as to the desirability of such allocation. Limitations may also be put on the types of goods which are permitted to be shipped to Canada and on the use to which they may subsequently be put. Not only may the direct cost of imports be affected by the cartel but the export of manufactured goods for which the imports may constitute necessary materials may also be influenced.

We have taken some examples of cartels in this class to illustrate the effects of such arrangements on our foreign trade and domestic economy. Other examples are to be found in the material we have examined but it is not considered necessary to make an exhaustive presentation in order to indicate the general nature of the private controls which may apply to imports.

Fertilizers: Potash, Nitrogen and Phosphorus

The first group of cartel arrangements to be examined are those relating to fertilizers. Fertilizers rank among Canada's important imports because they constitute essential supplies for many types of agricultural production. The three elements which are usually added to the soil to stimulate effective plant growth—nitrogen, phosphorus and potassium—may be combined in commercial fertilizers in varying proportions to suit the needs of the particular crop to which they are to be applied. Imports of fertilizer materials in the years immediately prior to the war totalled between three and four million dollars annually. For the period 1937-1939 imports of potash (potassium) averaged approximately $1,250,000 per year, superphosphates (phosphorus) approximately $1,000,000 with phosphate rock slightly less than $500,000, and nitrate of soda (nitrogen) about $930,000.

Potash

Prior to the first Great War the potash industry was largely contained within the German Empire and production and sales of potash were controlled by a German syndicate. With the restoration of Alsace-Lorraine to France the Alsatian deposits came under French control. After a brief period of competition a cartel consisting of the German syndicate and the French producers was formed. Under an agreement made in 1924 and revised in 1926 arrangements were made to share world markets for potash but reserving the markets in Germany and France for the respective national groups. Joint sales offices were set up in the principal importing countries to allocate sales on the basis of 70 per cent to Germany and 30 per cent to France. Uniform prices were maintained in each country for all potash sold through the cartel offices. From 1924 to 1933 prices of potash at North American ports remained practically unchanged. When in 1932 Polish producers became a serious threat to the cartel, they were brought into line by the allocation of 4 per cent of the world market. This enabled the cartel to maintain a high level of prices in spite of the world depression, but when Russian and Spanish exports came on world markets in substantial volume in 1934, at a time when American production was also increasing, the rigid cartel prices had to give way and price reductions of 50 per cent were made in North America. Toward the end of the 1934 season the Spanish producers joined the cartel and certain arrangements are believed to have been made with the Russians. The effect of the competition from these new sources and its subsequent elimination is reflected in the prices per unit of 20 pounds of potash (K_2O) at United States ports:

1932	1933	1934	1935	1936	1937	1938	1939
$.619	.630	.300	.392	.440	.471	.471	.471

Once the Spanish and Russian exporters entered the European arrangement, the cartel reached an understanding with American potash firms whereby a uniform scale of prices was agreed upon. All parties to the arrangement agreed to quote prices only on the basis of c. i. f. certain recognized ports and to limit the number of ports which would be recognized for the purpose of such quotations. There appears to have been some difficulty in controlling exports of potash to Europe by independent firms in the United States. In 1938, however, a Potash Export Association was formed in the United States and an arrangement made with the cartel for a share of the European market.

As there are no potash deposits being worked on a substantial scale in Canada, our agricultural needs for this essential fertilizer material had to be met by imports which were subject to the cartel arrangements already referred to. A branch of the European cartel sales company was established in Montreal in 1928, and in 1932 this was set up as an incorporated company, Potash Company of Canada, Limited, a Canadian subsidiary of the German-French cartel whose headquarters at that time were in Holland. The close relationship between the cartel and the American producers of potash provided an opportunity for Canadian manufacturers and distributors of fertilizers to formulate common policies as to prices and conditions of sale. The examination of the industry by the Price Spreads Commission in 1934 revealed that the price of potash for direct sale to consumers was kept inordinately high with the object or certainly with the effect of discouraging farmers from mixing their own fertilizers. An official of an Ontario co-operative society has stated that great difficulty was experienced in securing supplies of potash in this period as imports were restricted to the recognized fertilizer manufacturers. After much effort this co-operative finally succeeded in securing American potash by making joint purchases with co-operative organizations in the United States. We shall return to the general situation in the Canadian fertilizer industry after we have discussed cartel arrangement affecting nitrogen and phosphorus.

Fertilizer Nitrogen

The possession of the only known workable deposits of sodium nitrate made Chile the dominant factor in the world nitrate trade, until the production of by-product nitrogen and the development of processes for the fixation of atmospheric nitrogen made possible an almost unlimited supply of nitrogenous products. Prior to World War I Chilean nitrate provided about 54 per cent of the world's requirements of nitrogen compounds; sulphate of ammonia, by-product of steel and coke industries, provided about 34 per cent; while the remaining 12 per cent was made up of various forms of synthetic nitrogen. These proportions are in terms of pure nitrogen content of the various products. By the end of the war the proportion of synthetic nitrogen had risen to 23 per cent, while Chilean nitrate, although amounting to about the same tonnage, had dropped to less than 40 per cent.

Chile had long levied a substantial tax on exports of nitrate and the returns from this tax provided a large part of government revenue. Chilean governments had tended to foster close relations among the producing firms, most of which were controlled by foreign capital, so that prices could be kept as high as possible without prejudicing the volume of exports and thus permit the exporters to bear more easily the export tax. In spite of the growing production of synthetic nitrogen the policy of charging all the traffic would bear was continued under government support after 1919 when the Chilean Nitrate Producers Association was re-established. Fixed prices were set by the association and an export quota was allotted to each producer. From 1920 to 1927 prices of natural nitrate were held from 3 cents to 4 cents per pound of pure nitrogen above the prices of by-product and synthetic nitrogen. The result was further stimulus to synthetic production and the accumulation of unsold stocks of Chilean nitrate. As nitrate exports formed more than 40 per cent of her export trade, the situation in Chile became critical and in February, 1927, restriction was abandoned. Exports of Chilean nitrate, which had fallen from 2,500,000 metric tons in 1925 to 1,600,000 tons in 1926, immediately increased to 2,375,000 tons in 1927 and to 2,801,000 tons in the following year.

German producers of synthetic nitrogen had succeeded in organizing a cartel in 1926 and later Imperial Chemical Industries and Norsk Hydro, a Norwegian company, joined with the German group to form an international

cartel known as D. E. N. Early in 1929 negotiations by the Chilean Finance Minister with Imperial Chemical Industries and I. G. Farben (Interessen Gemeinschaft Farbenindustrie Aktiengesellschaft) a giant German industrial combination with world-wide activities, led to a tripartite agreement regarding the prices and co-operative marketing of natural and synthetic nitrogen products. In the following year a second agreement embracing 80 per cent of the world production, was reached between the Chilean and European producers. This provided for allocation of markets and quotas, restriction of output and a common price policy. The agreement lapsed in 1931 when, in the face of the loss of markets caused by the depression, no common policy could be agreed upon.

The various national associations appear to have maintained control in their home markets in the years following, and in 1938 some thirty-five producers of synthetic nitrogen, including the D. E. N. group, entered into a world-wide agreement, Convention Internationale de l'Azote (international nitrogen cartel). The home market of each group was reserved for the national members, while quotas were established for export markets under arrangements providing for the averaging of receipts from sales made through joint selling agencies and for compensation to members selling less than their quotas by requiring purchases by members who exceeded the quotas fixed. The synthetic nitrogen cartel then made an agreement with the Chilean nitrate producers whereby uniform prices were agreed upon and the Chileans were allotted quotas in both home and export markets of the cartel members.

Synthetic nitrogen was produced in the United States prior to World War II principally by Allied Chemical and Dye Corporation and E. I. du Pont de Nemours and Company. In addition, steel and coke plants produced substantial quantities of sulphate of ammonia. The distribution of synthetic and by-product nitrogen from these sources had been concentrated in the hands of the du Pont Company and the Barrett Company, the latter acting as exclusive sales agency for almost 90 per cent of the production of sulphate of ammonia. It was alleged in a complaint filed by the United States Department of Justice in 1941 that the American firms had agreed with the European cartel and the Chilean producers to maintain uniform prices and to share North American and world markets on a quota basis. The complaint was disposed of by a court judment in 1941 enjoining the firms from continuing the practices complained of.

In Canada the use of fertilizer nitrogen from domestic sources prior to the war was confined largely to sulphate of ammonia, which was produced as a by-product from steel and coke plants and, after 1930, by the Consolidated Mining and Smelting Company as part of its manufacture of synthetic fertilizers at Trail, British Columbia. Calcium cyanamide, a nitrogenous product, was manufactured at the Canadian plant of the American Cyanamid Company at Niagara Falls, Ontario, but practically the entire output was exported to the United States.

For many years prior to the war, sulphate of ammonia was produced in Canada in excess of the demand and exports were consequently made. Supplies available for export were considerably increased as the production of sulphate of ammonia became fully developed at the Trail smelter. The logical export markets for the expanding production were the agricultural areas on the Pacific coast of the United States, the Hawaiian and Philippine Islands and other territories bordering the Pacific. Most of these markets were already subject to understandings between American producers and the nitrogen cartel and the division of markets was discussed by the Canadian producer with the cartel members. In the complaints of the U.S. Department of Justice it was

alleged that quotas were allotted to the Canadian company in certain markets, including the United States and the Philippine Islands and that uniform prices on the basis of nitrogen content were agreed upon.

Although Canada produced sulphate of ammonia in excess of domestic requirements the location of producing plants made it advantageous to import this product for use in some farming areas. Other forms of fertilizer nitrogen were also secured through imports of natural and synthetic nitrates. Before the cartel had established the definite allocation of world markets which was achieved in 1938 synthetic nitrate of soda was being imported directly from Norway to ports in the Maritime Provinces. This permitted bulk steamer shipments and consequently lower costs to the farmers in that area. When agreement was reached by cartel members for the allocation of export markets Canada was allocated to the United States and Chile. Further shipments could not be made to Canada from Norway, and Canada had to look to Chile or the United States for supplies. These were usually handled through the port of Baltimore which made it impossible to secure direct shipments. The control exercised by the cartel thus deprived Maritime farmers of the freight advantages which their location near tidewater ports had made possible when fertilizer supplies could be purchased on a competitive basis.

During the war the need of chemicals for explosives led to the development of several government-owned ammonium nitrate plants in Canada. Through scientific research it has been found possible to produce ammonium nitrate in a form suitable for use as commercial fertilizer. This development has greatly increased potential supplies of fertilizer nitrogen in Canada and should be a significant factor in the fertilizer trade of Canada in the post-war period.

Phosphorus

This element, in the form of available phosphoric acid, is chiefly obtained and supplied commercially for fertilizer use in the form of superphosphates. This product represents the most important fertilizer material in terms of tonnage and is largely produced through treating phosphate rock with sulphuric acid. Prior to the war superphosphates and phosphate rock were imported into Canada in about equal quantities; the latter material, secured from the United States, was used for the manufacture of superphosphates in Canada. As in the case of sulphate of ammonia, superphosphates are exported from Canada by those producing plants located at a distance from the principal Canadian consuming areas. In 1939 imports of superphosphates totalled about 104,000 tons while exports were almost 53,000 tons, the greater part of the trade being with the United States.

The production of pebble phosphate rock, the principal form in which it is mined in the United States, is largely controlled by members of the Phosphate Export Association, which has had co-operative arrangements with the Florida Hard Rock Phosphate Export Association. Some of the member companies use the phosphate rock for the production of superphosphates as well as engaging in export of phosphate rock. In 1931 the principal manufacturers in the United States formed the Superphosphate Association which operated as an open-price association in the industry, the various companies filing with the secretary details as to prices and unfilled contracts. In an investigation made by the United States Department of Justice it was revealed that agreements had been made with fertilizer companies in Canada for the sale of superphosphates on condition that the American firms would refrain from directly or indirectly selling mixed fertilizers in Canada.

In the inter-war period Tunisia and Morocco were the leading world exporters of phosphate rock. Considerable quantities were also exported from Algeria and Egypt. In a report on the industry contained in the United States

Foreign Commerce Weekly of June 19, 1943, it is stated that a cartel of North African producers was established in the summer of 1933. The producers at that time were faced with a severe decline in demand as a result of the depression and with the possibility of increased exports from the United States as a result of the depreciation of the American dollar. In September, 1933, the cartel arrangement was extended to include Egyptian and United States exporters. While the details of these arrangements were not made public it is stated that they served to maintain prices and to preserve North Africa's position as the chief supplier of phosphate rock to Europe. It may be assumed that the arrangements also served to preserve North American markets for United States producers. On July 2, 1945, the United States Federal Trade Commission announced it had recommended to the Florida Hard Rock Phosphate Export Association that it withdraw and rescind certain cartel agreements with North African and Curacao phosphate producers as these "were found to have a tendency to restrain trade within the United States".

Inquiries made by the Price Spreads Commission in 1934 revealed that the principal fertilizer manufacturers in Central Canada at that time were also organized in a close association which established uniform delivered prices for each grade of fertilizer, regardless of the actual freight cost from the mixing plant to the farm. The Commission reported that "this monopolistic control of the market was further bulwarked by a policy, on the part of chemical manufacturers and importers, of hindering the sale at market prices for home mixing of the separate fertilizer constituents." The growth of fertilizer business by co-operative organizations has forced some modifications in the policies of the fertilizer manufacturers, but the control over basic materials established by the international cartel arrangements appears to have continued until the outbreak of war.

Tanning Materials—Quebracho

Another essential import commodity is quebracho extract, which provides the principal source of tannin used in Canada for the production of sole and other leathers. The quebracho tree, from the wood of which the tannin extract is derived, grows principally in Argentine and Paraguay. For many years the greater part of the forests have been controlled by English interests who dominate the industry in South America. Throughout the greater part of the period since the beginning of the century, a regional monopoly has been maintained through arrangements between the dominant English group and the smaller producers and exporters providing for fixed prices and export quotas. The syndicate established exclusive selling agents in the principal importing countries and allowed sales to be made only through such agencies, in such volume, and at such prices as had been agreed upon. Canadian tanners could secure supplies through either of two designated agencies in the United States.

The importance of quebracho extract, with the increasing production of leather for war needs, is shown by the consumption in the Canadian tanning industry, which increased from 6,350 tons in 1939 to 10,122 tons in 1942. For a period during the early thirties the cartel arrangement broke down, but a new agreement was reached in 1934. The essential feature of the arrangement is indicated by the following extract from the memorandum of agreement:

> "The selling groups will receive instructions from the Control Office as to the quantities of each brand that they may sell and the minimum prices to be demanded f.o.b. Buenos Aires."

Some years later, when a further breakdown threatened, the Argentine and Paraguay governments were persuaded to support the quebracho monopoly by fixing by decree maximum export quotas for each producer in line with the sales allocations already made under the private agreement. Efforts by United States

authorities to build up a stock pile of quebracho, as a precaution in the event of interruption to shipping from South America during the war, were not successful although negotiations were carried on for a considerable time.

Flat Glass

Glass and glass products stand high in the list of Canada's imports from the viewpoint of both usefulness and value. For a number of years prior to the outbreak of the war there was no manufacture of either window or plate glass in Canada, although laminated glass was made from imported flat glass. Imports of window glass normally exceeded 40 million square feet annually, while two to four million square feet of plate glass were also imported.

Prior to the first World War sheet or window glass was produced in Europe almost exclusively by hand or machine cylinder methods. In 1921 the Libbey-Owens method of sheet drawing, which had been developed in the United States, was introduced into Belgium by a company jointly owned by a group of Belgian financiers and the Libbey-Owens-Ford Glass Company of the United States. The joint company was given the exclusive right of exploiting the new process in Europe and proceeded to organize subsidiary companies in France, Germany, Italy, Spain and Switzerland.

Another mechanical process of making window glass was the Fourcault method. Belgian plants using this process, which already had a common sales organization, were amalgamated in 1930. By 1932 practically all European sheet glass plants had entered a cartel for the regulation of sales in both domestic and export markets. Czechoslovakian producers refused to renew the agreement in 1934 but the various national associations appear to have maintained control in domestic markets and to some extent over imports.

Cartel arrangements with respect to plate glass date back at least to the formation of The International Convention of Plate Glass Manufacturers in 1904 among continental glass firms. Production has been concentrated to an even greater extent in this field of glass production than in the case of window glass although some companies engage in both lines of production. In 1929 Pilkington Brothers Limited, St. Helens, England, which has a practical monopoly of the production of flat glass in Great Britain, entered into a sales agreement for a period of ten years with the International Plate Glass Convention (Convention Internationale des Glaceries, Brussels). It appears that there was no specific allocation of export markets but the parties agreed to maintain relative over-all export positions on the basis of the volume of trade each possessed during the period 1925 to 1928 inclusive. Under the agreement the participating groups undertook to observe in all export markets, including Canada, a common basic level of prices to importers. As Belgian glass was considered to be slightly inferior to British glass the Belgian exporters were permitted, at times, to sell below Pilkington Brothers in order to maintain their position in the market.

The dominant American manufacturers of flat glass are Libbey-Owens-Ford Glass Company and Pittsburgh Plate Glass Company which together make more than 90 per cent of the plate glass and about 60 per cent of window glass manufactured in the United States. According to a complaint filed by the Department of Justice on May 23, 1945, the two American companies had, prior to 1934, followed a practice of licensing their patents to foreign companies or transferring patents to holding companies or affiliated companies abroad under conditions which precluded licensees from exporting to the United States. In 1934 the American manufacturers entered into an arrangement with Pilkington and the Convention to observe the prices established by the cartel and to regulate their sales of plate glass in a group of export markets which included Canada. Notice of the termination of this agreement was given toward the end of 1934

but the termination was offset by the formation of the Plate Glass Export Association by the American companies. On December 31, 1935, the American companies and the Plate Glass Export Association made a declaration of policy with Pilkington and the Convention in which they agreed to divide the world market and fix prices for plate glass. This agreement is alleged to have remained in effect until the outbreak of World War II.

As part of the general governmental policy to expand Empire trade, the Canadian tariff was changed in 1932 to make the principal plate glass items free under the British Preferential Tariff. It appears to have been the expectation that the Canadian automobile industry would require increased quantities of English plate glass to assist in building up the empire content of cars for export to other parts of the Commonwealth. There is no doubt that the automobile industry welcomed the removal of duty but apparently the desire of the Canadian Government for freer importation of English plate glass did not fit in with the division of the Canadian market as fixed by the cartel arrangements among the plate glass manufacturers of Great Britain, Continental Europe and the United States.

In 1936 as part of the inquiry into the automobile industry the Tariff Board investigated the effect of the removal of duty on imports of English plate glass. Canadian automobile manufacturers complained of their inability to secure sufficient English plate glass to meet the requirement of Empire content in exports to other parts of the Commonwealth. An official of one of the automobile companies testified during the Tariff Board hearing:

> "We endeavoured to buy 100 per cent of our glass from Mr. Phillips' company made of empire glass. When we first sent the inquiry out it brought back the comment that our glass would cost us more money. We signified a willingness to entertain an increase in price to help our content picture, particularly in view of our export requirements, which amount to one-third of our total business. Finally we were told we could not get more than, I believe, 22 per cent of our glass requirements from England."

The Vice-Chairman of the Tariff Board then questioned the Canadian representative of the English plate glass manufacturer as to the arrangements in effect among the producers in various countries.

> "The VICE-CHAIRMAN: Isn't the answer really in the existence of a cartel that absolutely controls this glass? Isn't that the answer?
>
> Mr. HARRISON: It may be.
>
> The VICE-CHAIRMAN: You are only one concern in the British Empire and you are linked up with the world cartel—let us call it by its right name. Isn't that exactly what the situation is?
>
> Mr. HARRISON: There is no doubt there is an agreement.
>
> The VICE-CHAIRMAN: Whether you call it an agreement or a cartel, it is there.
>
> Mr. HARRISON: But I can positively assure you we are not members of the cartel.
>
> The VICE-CHAIRMAN: Perhaps you are not, but whether you are or not you are at least following them very closely.
>
> Mr. HARRISON: Oh yes, I admit that.
>
> The VICE-CHAIRMAN: They set the pace and you follow it, so that it amounts to the same thing.
>
> Mr. HARRISON: Oh, I think there would be an agreement, sir."

It is evident from the foregoing that the arrangements made by the cartel members prevailed in spite of the tariff change and rendered the action of the Canadian Parliament of no practical effect in relation to the trade in plate glass.

Sulphur

Large quantities of sulphur are used in the manufacture of pulp and paper as well as in other industries. In the period immediately prior to the war the value of sulphur imported ranged from $1,500,000 to over $3,500,000 per annum, of which all but a very small part came from the United States. Sulphur is also an important raw material in the manufacture of sulphuric acid, which is regarded as the most basic of all chemical products in view of its use in so many fields of manufacturing. Sulphuric acid can also be derived from pyrites and from waste smelter gases.

Up to 1905 the sulphur mines of Sicily constituted the principal source of crude sulphur, but when oil became available as a source of cheap fuel in the Gulf States there was a rapid development of sulphur mines in that territory. The competition from the United States caused a crisis in the Sicilian sulphur industry and led the Italian Government to establish a compulsory cartel in 1906 embracing all the Sicilian producers. A preliminary agreement was made in 1907 between the Union Sulphur Company, the principal American producer, and the Sicilian Consorzio, followed by a final agreement early in 1908. This agreement provided for the fixing of uniform sales prices on all markets and the allocation of sales quotas between the Sicilian and American producers. The Italian market was reserved exclusively for the Consorzio. The agreement was cancelled by the Union Sulphur Company in 1913, but formal arrangements were re-established in 1923 following the formation of Sulphur Export Corporation in 1922 under the Webb-Pomerene Law. The Sulphur Export Corporation is an export trade association jointly owned by Texas Gulf Sulphur Company and the Freeport Sulphur Company, who, between them, own or lease virtually all of the workable deposits of brimstone in the United States.

A new agreement was made in 1934 between the Sulphur Export Corporation and the Ufficio Per la Vendita Dello Zolfo Italiano, a compulsory sales office created under Italian law in 1933. Under the terms of this agreement prices were to be fixed by joint action of the two parties "in such manner as best to serve their mutual interest." Export tonnage was allocated between the Sicilian and American group on a sliding scale so that the Sulphur Export Corporation secured 50 per cent of the first 480,000 tons, 75 per cent of the next 145,000 tons and 90 per cent of everything above 625,000 tons sold in any year in all markets outside Italy and North America. Although neither party was specifically excluded from the territory of the other, American sales to Italy and Italian sales to North America have been negligible in quantity. The agreement provided that if either party exceeded the sales quota allotted to it, the offending party should be penalized by having its quota reduced by two tons for each ton in excess and the other party should be given a corresponding increase of two tons.

One of the purposes of the agreement was to maintain the status quo, as is indicated by the following provision:

> "It is the judgment of both parties that the situation of the sulphur-manufacturing industry in the countries covered by this agreement should be maintained as it at present exists throughout the life of this agreement; each party agrees not to do or encourage anything which would result in

altering such present situation and any action of a nature to alter such present situation shall be jointly considered and both parties shall use their best endeavours to prevent any such alteration."

When a Norwegian company, Orkla Grube Aktiebolag, developed a new process for extracting sulphur from pyrites the Sulphur Export Corporation made an agreement with the Norwegian company under which Orkla Grube undertook not to license others to use the new process and to confine its sales to Scandinavia and the countries bordering the Baltic. The continents of Europe, Asia and Africa were described as joint territory, in which sales were to be divided 1/3 to Orkla and 2/3 to Sulphur Export Corporation. The agreement was made subject to the concurrence of the Italian Ufficio.

The elimination of competition in world markets and the control possessed by the two principal American producers permitted the price of sulphur in the United States to be maintained, regardless of business conditions, at practically a fixed level of $18 per ton for seventeen years prior to 1938. The price was then lowered to $16 per ton, which became the new fixed level. In times of good demand the fixed price produced very large profits for the two members of Sulphur Export Corporation. Average annual profit on investment over a period of about two decades was reported to be more than 13 per cent in the case of one company and almost 29 per cent in case of the other.

In view of the stability in the price of sulphur it is interesting to note the trend of sulphuric acid prices in Canada. After remaining firm at $12 per ton for several years the wholesale price of sulphuric acid advanced three times in the summer of 1929 to become stabilized at $16 per ton. This price was held all through the depression years and on into 1937, when it was increased to $17 per ton. This suggests an aspect of price policy which should warrant closer examination. That is, that in the absence of competition prices may move upward rapidly but may be resistant to any downward movement.

Dyestuffs

Prior to World War I about three-quarters of the world supply of dyestuffs came from German factories and even dyes made outside Germany embodied intermediate products of German origin. When the supply of German dyestuffs was cut off, production in other countries was greatly stimulated. This was particularly true in the United States.

After the close of the war the three leading Swiss dye manufacturers—Ciba, Geigy and Sandoz—entered into a community of interests agreement and later established under joint ownership a manufacturing plant in the United States. In spite of the co-operative arrangement each Swiss company established a separate sales company in the United States, and Ciba and Sandoz also established subsidiary sales companies in Canada.

Dye patents and other property of the Bayer and Synthetic Patents companies seized by the Alien Property Custodian in the United States were sold along with other assets in 1919 to Sterling Products Company Incorporated which, with the knowledge of the Custodian, had agreed to re-sell the dye properties to Grasselli Chemical Company, which had a branch in Canada. In 1923 the German Bayer Company sought to re-enter the United States market and in the following year concluded an agreement with Grasselli whereby a new jointly owned company was established under the name of Grasselli Dyestuff Corporation. In 1925 a new company, General Dyestuff Corporation was formed to take over the sales activities of Grasselli and the agencies in the United States of a number of German dye companies which were being consolidated into I. G. Farben. The manufacturing properties of Grasselli Chemical were

later acquired by du Pont. Thus, within a few years after the war German dye interests were fully re-established in the American market and the efforts made to keep the former German patents in American control had been nullified. If Canadian policy after this war is to prevent control of the patents and other enemy assets which have been seized from returning to enemy hands, it would appear necessary to devise much more effective measures than were employed after the first World War.

The principal dye manufacturers of France organized a joint association in 1927 and two years later the German, Swiss and French groups reached an accord which is commonly referred to as the European Dye Cartel. This provided export quotas, price fixing in various markets so as to obtain an average return for each of the adherents, exchange of information on methods of production and utilization, maintenance of common sales bureaus by German and French members, with the Swiss maintaining their independent sales organizations.

Imperial Chemical Industries entered the European Dye Cartel in 1931 under an agreement which reserved to itself the sale of dyestuffs in Great Britain. Two years previously ICI and du Pont had reached an agreement covering the exchange of patents and "know how" on a wide range of products, including dyestuffs. Du Pont agreed not to export dyestuffs to the British Empire, exclusive of Canada and Newfoundland, while ICI agreed not to export to North and Central America, exclusive of British territory. In other markets, including British North America, the two companies undertook to eliminate competition between themselves and to co-operate in the sale of dyestuffs in such markets. Canadian Industries Limited was to be used as their agent in the sale of dyestuffs in Canada. Pursuant to the agreement ICI transferred to du Pont its wholly owned subsidiary Dyestuffs Corporation of America.

From 1927 to 1929 Du Pont and I. G. Farben sought to reach an agreement to establish a jointly owned dye company in the United States. However as du Pont insisted on a controlling interest while I. G. would not accept anything less than 50 per cent, the negotiations were abandoned with both concerns agreeing to establish as "frank and friendly relations as possible". The evidence presented to the Bone Committee shows that the two corporations along with other members of the dyestuff industry pursued a policy of establishing uniform conditions for the sale of dyestuffs in the United States and other markets. The following extract from a letter dated October 26, 1939, from du Pont to Geigy (U.S.A.) shows how closely the various companies worked together to maintain uniform prices:

> "We have yours of Oct. 24th regarding our recent list of Canadian prices, and note that you are not certain on this point.
>
> The price shown in the left-hand column, headed 'Present Canadian Prices,' includes the 10% increase for exchange and was the price in effect in Canada immediately prior to Friday, Oct. 13th. These prices were obtained by adding 10% on to the spot prices (not contract) which were in effect prior to Sept. 1st.
>
> As regards Erio Chrome Black T—10% increase on your old spot price, which was in effect prior to Sept. 1st, will be, as you say, your selling price in Canada to-day for that particular colour.
>
> Strengths of products in Canada are identical with those in the States with the exception of two or three colours, for example—
>
> Alizarine Sapphire BN in Canada is only 95%.
> Alizarine Cyanone Green G. Ext. is 90%.
> Wool Yellow Ex Cone is 95%.
> Auramine O is 95%.
>
> as compared with similar products sold in the United States."

The exact manner in which the Canadian market was shared among the various cartel members in Europe and the United States is not clearly indicated in the records we have so far examined. There has been no production of dyestuffs in Canada in commercial quantities and the market was supplied through the Canadian representatives of the foreign firms. In 1925 Consolidated Dyestuff Corporation was incorporated in Canada as a wholly-owned subsidiary of one of the German companies which became incorporated in I. G. Farben. Consolidated Dyestuff Corporation secured agency contracts for the sale in Canada of German and French dyes. After the formation of the European Dye Cartel in 1929 the French members appear to have been allotted a definite quota of the Canadian market. Consolidated Dyestuff Corporation was required to observe a definite ratio between its sales of the products from I. G. Farben and French firms for whom it acted as exclusive Canadian agents. The French firms were pressing for a larger share of the Canadian market and succeeded in 1938 in having the proportions changed from 97 per cent for Germany and 3 per cent for France of the combined sales of Consolidated Dyestuff Corporation to 94 per cent and 6 per cent respectively. Consolidated Dyestuff Corporation was given close directions as to the products to be purchased from each of its principals and as to its purchase prices.

With no domestic manufacture of dyes, Canada's imports of such products form an important and essential part of our foreign trade. Under peacetime conditions the quantity of imported coal-tar dyes amounted normally to about $4\frac{1}{2}$ to $5\frac{1}{2}$ millon pounds, valued at between three and four million dollars. The situation at the outbreak of war has been described by one importer in the following terms:

> "When war was forced upon us, Canada, with no dyestuff plants of her own to which to turn and deprived, not unwillingly, of one of her largest sources of supply which was Germany, found it necessary to rely upon American, British and Swiss producers to provide her at short notice with considerable quantities of the colours required for military work. In many cases the products required were not normally stocked or only stocked in minor quantities and the close co-operation of the manufacturers was necessary to enable the Canadian textile industry to keep pace with the increasing momentum of Canada's war effort."

If Canadian textiles are to succeed in holding consumer preference in domestic and foreign markets in competition with the products of other countries, our manufacturers must have access to good dyes at reasonable prices. We cannot afford to have our mills arbitrarily limited to certain sources of supply and certain types of dyes. They should be free to experiment with various types of dyes and find those that have the greatest consumer appeal both in colour and fastness, for nowhere is the value of innovation in design and material more important than in the field of textiles.

Tools—Cemented Tungsten Carbide

This material is the best hard metal composition yet discovered for making cutting edges of machine-cutting tools and wire-drawing dies and hence an invaluable product in connection with war preparations. In many machining operations substitution of tungsten carbide for high-speed steel multiplies the rate of production at least 500 per cent.

The properties of cemented tungsten carbide had been known for many years, but its development as a satisfactory metal cutting agency came in the nineteen twenties and mainly in Germany. About 1926 the Krupp Company of Germany began to ship tungsten carbide to two American firms and was nego-

tiating with a view to granting licences under certain United States patents which it owned to a number of other American companies. The General Electric Company had secured rights to the same patents for use in the manufacture of electric lamps but not for other uses. The General Electric Company had also developed some patents of its own covering competing processes for the manufacture of cemented tungsten carbide. Instead of utilizing its patents independently or of testing its rights General Electric chose to pool patents with Krupp and secure control of the United States market.

An agreement between General Electric and Krupp, concluded in 1928, provided that General Electric should have the power to fix the initial prices and resale prices at which such hard metal compositions should be sold in the United States. Krupp agreed to observe such minimum prices on its sales in the United States and to require those whom it supplied or licensed in the United States to observe the resale prices fixed by General Electric.

Prior to 1928 the market price of tungsten carbide in the United States had been about $50 a pound on the basis of the shipments made by Krupp. Following the conclusion of the agreement with Krupp the price was raised by General Electric, or rather by its subsidiary, Carboloy Company Incorporated, which it had organized to carry on this part of its business, to $453 per pound, although the price of $50 had been previously considered high.

In 1936 a further agreement was made with Krupp whereby the German company undertook for certain considerations to refrain altogether from making further shipments of tungsten carbide to the United States. General Electric and Carboloy agreed on their part not to export from North America and to refrain from issuing any additional licences in the United States without Krupp's consent. General Electric and Carboloy, having thus secured virtual monopoly control over the production and use of tungsten carbide in the United States and Canada, reduced the maximum price in 1936 from $453 to $205 per pound, still four times the high price of 1927.

During this period it was estimated that Europe was using about eight times the poundage of cemented carbide used by the United States and Canada. Germany, where the superior hard metal composition was helping to speed up rearmament, was estimated to be employing tungsten carbide in the ratio of 22 to 1 compared with the United States. Before the price reductions in 1936 a piece of tungsten carbide weighing 10 grams cost $6 in the United States while the price in Germany was about $1.75. In 1939 the same piece would have cost from $2.10 to $4.50, depending on the number of identical pieces bought at one time, while the price in Germany was $1.40. The introduction of quantity differentials by Carboloy was made apparently to head off possible competition from the very large users. The great majority of possible users required lots of 10 or 100, whereas the substantial price reductions applied only on purchases of 1,000 and 3,000 identical pieces, which purchases would amount to thousands of dollars.

The high prices charged by Carboloy were regarded by machine tool manufacturers as a very serious handicap to the wider use of cemented tungsten carbide in the United States and led to sharp protests from members of the industry. The following was contained in a letter written to the Carboloy Company in 1936 by the Monarch Machine Tool Company of Sidney, Ohio:

> "We are vastly more interested in when the Carboloy Company is going to reduce the price of Carboloy and Tantalum Carbide and get it down somewhere near the price at which it sells in European countries. We are paying eight to ten times the prices for these tools that they bring in foreign countries, and this excessive price is a very serious handicap. As a matter of fact, machine shops in continental Europe are far surpassing us in this

country on many machine jobs, due to their far more universal use of these new carbide tools. You can never put the job over in this country so long as there is this wide difference in price."

General Electric and Carboloy were indicted under the United States anti-trust laws in August, 1940, and immediately there were very sharp reductions in the prices of cemented tungsten carbide, especially for smaller quantities which met the needs of most users. The price of a 30 gram tungsten blank, which is generally used in machine shops, is shown in the following table. In August, 1929, the price for any quantity was $30. Following the suit against Carboloy in 1940 the price was $3.60 to $3.00, depending on quantity. In the next year the price was $2.10 per 10 gram for any quantity of this blank. This would be at the rate of about $32 per pound compared with $205 in 1939.

	Lots of 10	Lots of 100	Lots of 1,000	Lots of 3,000
Aug. 1929	$30 00	$30 00	$30 00	$30 00
Aug. 1939	13 50	9 99	5 94	3 38
Sep. 1940	3 60	3 00	3 00	3 00
Oct. 1941	2 10	2 10	2 10	2 10

While tremendous strides have been taken since 1940 in the United States and Canada in the use of this time-saving and highly efficient material, rearmament might have been assisted even more in the early period if the prices of tungsten carbide had not been held at excessive levels from 1928 to 1940.

Magnesia Refactories

These essential materials for the efficient functioning of the great metallurgical plants producing steel, nickel, copper and other metals are subject to very close cartel arrangements. Magnesite bricks from Canadian refractory materials have too high a silica and lime content for use in lining nickel converters and the roofs of copper furnaces, and high grade magnesia products must therefore be imported. The most satisfactory material is dead-burned magnesia from Austria. In 1923 the two principal manufacturers of magnesite brick in the United States, Harbison-Walker Refractories Company and General Refractories Company, entered into agreements with the European producers of magnesia along the following lines:

(*a*) That the world market be divided so that United States, Canada and Mexico would be reserved for Harbison and General, and the European group would have Europe, Asia and Africa.

(*b*) That the European companies would not sell or ship magnesite or magnesite brick to any company in North America except Harbison and General.

(*c*) That none of the parties to the agreement would sell magnesite or magnesite brick directly or indirectly for use in the area allotted to any other without the latter's prior approval.

(*d*) That two-thirds of all magnesite purchases of Harbison and General would be made from the European group in the proportion of 60 per cent by Harbison and 40 per cent by General.

This arrangement was revised from time to time but remained substantially in effect until the outbreak of war. Under the cartel agreement Canadian users were barred from securing high-grade magnesia refractories except from the two American manufacturers to whom the Canadian market had been allotted. European supplies became unavailable after 1939 but it was found possible to produce magnesia from brucite deposits in the province of Quebec which could be used for the manufacture of refractory brick.

During World War I when supplies of Austrian magnesite were cut off use was made in Canada of deposits of magnesitic dolomite in Quebec to produce refractory products. While these did not possess the same properties as products made from Austrian magnesite they had distinct characteristics which made them very useful for particular purposes. The processes developed in wartime were not commercially successful and it was only after years of painstaking research in conjuction with the National Research Council that Canadian Refractories Limited, a Canadian company, succeeded in producing products competitive in cost and usefulness with those available in other countries. Patents were secured by Canadian Refractories Limited on certain of its new developments and these formed the basis of certain agreements with companies abroad. The control of Austrian magnesite and other high-grade deposits in the post-war period has yet to be determined. It may be noted that Canadian newspapers reported in May, 1945, that a controlling interest in the stock of Canadian Refractories Limited had been acquired by Harbison-Walker Refractories Company of the United States, one of the American corporations which had been a party to the cartel arrangements affecting Austrian magnesite.

Titanium Pigments

National Lead Company of the United States has taken an active part in organizing a concert of titanium interests throughout the world so as to establish what virtually amounted to a world combine. Titanium oxide is a white pigment which is used principally in paint but also in the manufacture of rubber, glass, paper and vitreous enamel. It is superior to white lead and lithopone in that it remains white under any atmospheric conditions and as it is chemically inactive it can be employed without danger to workmen.

The reasons for the formation of the cartel were given as follows in a letter from the president of one of the American participating companies to an official in a European company:

> "May I call the proposed combination, for simplicity, a cartel? The whole purpose of the cartel is to obtain a monopoly of patents, so that no one can manufacture it (titanium) excepting the members of the cartel, and so can raise the prices by reason of such monopoly to a point that would give us much more profit on our present tonnage, but also prevent a growth in tonnage that would interfere with their greater profits in lithopone."

In 1920 National Lead bought a substantial interest in Titanium Pigment Company, which held the original American patents, and in the same year entered into an agreement with Titan A/S which held an early Norwegian patent. Under this agreement Titanium Pigment Company was allotted North America while Titan A/S was given the rest of the world with the exception of South America, which was to be jointly exploited. The two parties agreed to exchange technical information and any patents which either might acquire in the future. In 1927 National Lead acquired 87 per cent of the stock of Titan A/S and also a controlling interest in the Societe Industrielle to which the French market had been allotted. Also in 1927 National Lead and I. G. Farben established jointly Titangesellschaft to which was assigned most of the European market (Germany, Russia, Austria, Hungary, Czechoslovakia, Switzerland, Roumania, Yugoslavia, Bulgaria, Greece, Turkey, Spain) and also China and Japan.

National Lead had a potential competitor in the United States in du Pont, which had acquired the Krebs Pigment and Color Corporation, which was licensed under Blumenfeld patents providing an alternative method of producing

titanium oxide. In 1933, however, National Lead and du Pont entered into a cross-licensing agreement and du Pont agreed to confine its sales to the territories allotted to National Lead in 1920. Du Pont further agreed to offer licences to the foreign associates of National Lead for the various countries of the world.

Agreements were also made in 1933 among the various European Titan companies and those holding licences under Blumenfeld patents to divide world markets outside North America among themselves. When there were indications after 1930 of possible competition from British producers utilizing Blumenfeld patents, National Lead promoted a joint enterprise in Britain with ICI and two other interested firms. This left one other British firm holding rights under Blumenfeld patents and in 1941 National Lead reached an agreement with this company, Laporte, whereby the latter was to have 20 per cent of the British market for the duration of the war.

Prior to this time the Laporte Company had contemplated the erection of a plant in Canada, where it held the Blumenfeld patents and to which it had been making shipments of titanium oxide. In 1937 National Lead entered into an arrangement with Canadian Industries Limited for the establishment of a jointly owned corporation, Canadian Titanium Pigments Limited (51 per cent CIL and 49 per cent National Lead). CIL and National Lead agreed to grant the new company exclusive royalty free rights in Canada and Newfoundland under all their present and future patents covering the manufacture or sale of titanium pigments on condition that Canadian Titanium agreed not to export titanium pigments manufactured in the proposed Canadian plant. At the same time the Canadian patents and business were acquired from the Laporte Company and transferred to the new company. Until such time as a Canadian plant was operating National Lead was to furnish the requirements of Canadian Titanium, which has been the situation to date.

Canadian Titanium has submitted the following explanation of the agreement between CIL and National Lead:

> "Under these agreements Canadian Titanium is called upon to refrain from exporting titanium pigments. Quite apart from the fact that the benefits derived under the agreement would not have been available to the Company on more favourable terms, we believe that this restriction will not, in fact, operate to the disadvantage of Canada as there is no reason to expect that a Canadian plant would have any cost advantage over U.S. plants in competing in markets outside Canada. It is indeed probable that it might be at some disadvantage.
>
> In any case, however, it seems to us that the benefits gained by Canada outweigh materially any possible effect of this restriction. Owing to the technical difficulties of the process, which has been developed at considerable expense over a period of years by National Lead and by other companies operating in countries with a sufficiently large market to warrant the necessary research expenditure, we believe it would be uneconomic to attempt to develop a new process in Canada as, even if successful technically, the cost of the necessary research would be out of proportion to the business that could be served from a Canadian plant. By acquiring the accumulated technical knowledge of National Lead the erection of an up-to-date Canadian plant has been expedited; there is assurance that the Canadian product will be equal in quality to the U.S. product; improvements in quality and economies in process resulting from future National Lead research will be available to the Canadian plant; and the utmost economy in development,

capital and operating costs will be attained. As a result, employment will be provided for Canadians at the earliest possible date and the Canadian consumer will be assured a quality product of domestic manufacture.

Apart from the restriction on export, the freedom of Canadian Titanium is not affected and there is nothing in the agreement or in any oral understanding influencing selling prices, the type or grant of product, the use of which it may be put; the allocation of production, or sales quotas."

Deposits of ilmenite containing from 18 to 25 per cent of titanium oxide have been worked on a small scale in the province of Quebec for a number of years. The ore has been shipped to the United States for further processing as an alloying agent. Some time prior to 1928 the Bureau of Mines developed independently a process for extracting titanium oxide from Canadian ilmenite deposits. A Canadian company was formed to exploit the process and application made to the Tariff Board for a protective tariff. It was alleged during the hearings at that time that the production of titanium oxide was subject to a world cartel. The independent company never undertook production in Canada and so far the Canadian deposits have not been used for the production of titanium oxide.

These brief summaries of the operation of individual cartels are given, as stated earlier, as illustrations of the way in which Canada's foreign trade and the development of Canadian industries may be affected by such arrangements. Other examples could be found in connection with certain aircraft instruments, beryllium, camphor, diamonds, magnesium, optical goods, plastics, pharmaceutical products, quinine, without exhausting the list of commodities subject to some form of cartel control, imported prior to the war. While this report was being prepared, the United States Department of Justice alleged the existence of cartel arrangements affecting borax, diesel engines, disc grain separators and storage batteries and indicated that inquiries were being pursued in other fields.

2. Examples of Cartel Arrangements Restricting Canadian Manufacturers to Home Market on Exclusive Basis

Arrangements of this kind often result from cartel agreements entered into by foreign parent companies of Canadian subsidiaries. In many cartel agreements Canada is regarded as part of the American market to be dealt with in whatever way the United States participants may decide. An American firm may be allotted the North American market and, instead of supplying the Canadian market from plants in the United States, will transfer the rights to a Canadian subsidiary company. In this way the manufacturing plants in Canada are protected against competition from outside producers, but on condition that their production be used to satisfy only the Canadian market and that no attempt be made to enter any export markets. The nature and possible effects of such parent-subsidiary relationship will be discussed later.

In some cases Canada has been established as common territory for several members of a cartel and arrangements may then be made to exploit the Canadian market through a jointly owned company which may do some manufacturing in Canada and also serve as the sole distributor in Canada of other products made by controlling parties. Canadian Industries Limited is an example of this type and, as its position will serve to illustrate several aspects of this class of cartel, the arrangements under which it operates will be considered briefly.

Chemicals

The period between the two World Wars witnessed the development of combines in the chemical industry in practically all industrial countries and the establishment of a network of agreements among these dominant corporations providing for the exchange of patent rights and processes and the allocation of world markets. In Germany, I. G. Farben was reorganized in 1925, bringing into one organization the major chemical firms in that country. Imperial Chemical Industries Limited was formed in Great Britain in 1926 to acquire Brunner Mond and Company, United Alkali Company, British Dyestuffs Corporation and Nobel Industries Limited, four corporations which dominated the British soda, dyestuffs and explosives industries. In the United States the du Pont company and other chemical firms were branching out into diversified lines of production. Du Pont had had close relations with the Nobel concern since the beginning of the century. When ICI was created steps were taken to extend the arrangements in regard to explosives to include other products in which both corporations were interested. This led in 1929 to a new general understanding between ICI and du Pont which was formally embodied in the "Patents and Processes Agreement of 1929". This covered substantially all chemical products made by the two firms except those covered by prior contractual obligation by du Pont or ICI with other parties. The agreement was revised and extended in 1939. The essential features of the understandings between ICI and du Pont were that the British Empire, with the exception of Canada and Newfoundland, would be ICI's exclusive territory and that the United States and Central America would be du Pont's exclusive territory; each agreed to grant to the other exclusive licences under present and future patents in the territories exclusively assigned. As to the balance of the world not allocated exclusively to either of the two companies, ICI and du Pont would enter into special arrangements to eliminate competition between themselves and they would explore the desirability of utilizing joint companies to this end.

In Canada the basis for joint understanding had been laid in 1910 when du Pont and the English Nobel Explosives Company (one of the predecessors of ICI) had merged several explosives companies, together with a western company making acids and fertilizers and a sporting ammunition company, into a jointly owned company, Canadian Explosives Limited. Three Canadian subsidiaries of American firms in which du Pont had a controlling interest were acquired by Canadian Explosives Limited in 1919. After the formation of ICI as the dominant chemical combine in Great Britain the operations of two other explosives manufacturers were consolidated with Canadian Explosives Limited, which then became the sole producer of dynamite in Canada. In 1928 the operations of these chemical and explosives companies were more closely integrated by the establishment of Canadian Industries Limited, in which the various subsidiary companies became operating divisions. The combined equity of ICI and du Pont in the common stock of CIL is presently in excess of 80 per cent.

The consolidation of du Pont and ICI interests in Canada preceded similar developments in South America where du Pont and ICI had been making sales through separate subsidiary companies or local agents. It was not until after 1933 that Duperial-Argentina and Duperial-Brazil were established as jointly owned corporations to integrate the activities of du Pont and ICI in those countries.

The understandings with respect to Canada between ICI (or its predecessors) and du Pont, as has already been shown, have extended over a great many years. Some of the arrangements were made as informal agreements while others have been made as formal contracts. The most comprehensive of the

latter is the Tri-Party Agreement made on December 1, 1936, between du Pont, ICI and CIL. Under the terms of this agreement ICI and du Pont agreed to grant CIL exclusive licences for Canada and Newfoundland under patents, inventions and processes which they then owned or might thereafter acquire. CIL agreed to grant ICI and du Pont similar licences for the rest of the world outside of Canada and Newfoundland in conformity with their respective licence territories established by prior agreements. The fields covered by the Tri-Party Agreement included coated textiles, cellulose film, plastics, paints and finishes, fertilizers and insecticides, explosives and general chemicals.

The general effect of the agreements and understandings between ICI and du Pont with respect to the operations of CIL, as revealed in exhibits filed with U.S. Congressional Committees, may be summed up under three heads:

(*a*) CIL is given exclusive rights in Canada to any processes owned by either of the major parties. However the exercise of such rights with respect to the development of manufacturing capacity in Canada is to be governed by the position of the major stockholders. The considerations to be applied are indicated in the following extract from the minutes of a tripartite meeting held in Montreal in 1930:

> "It is very undesirable that CIL should provide manufacturing capacity in Canada if, from a family viewpoint, Canadian requirements can be more profitably supplied by the existing capacity owned by one of the major stockholders."

(*b*) CIL is made sole distributor for any products shipped to Canada by either ICI or du Pont. In handling products made by both major stockholders CIL is required to divide the business as far as possible on a 50/50 basis between ICI and du Pont. (In actual practice it has not been possible to maintain equality. CIL also makes purchases from other companies.)

(*c*) CIL is to confine its operations to Canada and is not to engage in any export trade, even when it is in a favourable position to do so through tariff preferences or other causes.

The position of CIL has been described in the following manner by Lammot du Pont:

> "We regard CIL as the vehicle of industrial effort for ICI and du Pont in Canada. The Canadian minority stockholders are investors who wish to place their money or allow it to remain, with the ICI-du Pont combination. The theory back of this CIL operation, so far as ICI and du Pont are concerned, is expressed in the old saying 'Canada for Canadians' meaning —the industrial operations of the partners in Canada are intended to be conducted through CIL. CIL was not set up to do anything else and has, we believe, never been considered so.
>
> If the above is correct, it seems to us to follow directly and as a matter of course that CIL shall stay in Canada and not spread out into other countries, either by laying down plants, exporting their products or licensing under their processes, unless both ICI and du Pont believe it is advantageous to so spread out and then only to the extent and for the time and under the conditions that ICI and du Pont agree upon."

Because of the restrictions on its operations CIL was unable to co-operate in the efforts made by the Canadian Government to expand trade with the West Indies through the subsidization of steamship facilities from Canada to

the West Indies and the establishment of favourable trade terms. . Minutes of a meeting between ICI and CIL officials in Montreal on September 16, 1932, record that an officer of CIL had stated:

> " CIL, in company with other Canadian firms, were subject to considerable pressure by their Government to develop Canadian export trade with the West Indies especially because the Canadian Government was spending important sums in subsidizing steamship facilities with the West Indies. He felt that the CIL position with its Government would be strengthened if free to quote on certain products—where necessary protecting ICI prices—as refusal to quote had led to complaints to the Government on occasion in the past."

In 1932 du Pont objected to CIL exporting to ICI in England "Pontan", a coated textile product developed by du Pont, on the ground that an exclusive sales agency for du Pont had been given to another company. However in 1934 permission was given to CIL to fill an order for "Pontan" on payment of a commission to du Pont. In 1933 du Pont refused CIL permission to export pyralin toilet articles to Australia although such trade was encouraged under the preferential tariff with Australia.

Soda Ash

Soda ash or sodium carbonate is used principally in the manufacture of glass, textiles and chemicals. The only manufacturer of soda ash in Canada is Brunner, Mond Canada Limited, which apparently is associated with Solvay Process Company, an American corporation which in turn is a subsidiary of Allied Chemical and Dye Corporation. Two substantial users of soda ash, in replying to our inquiry, indicated that in the pre-war period attempts had been made to secure quotations for soda ash from producers outside Canada but that in each case it was impossible to find any alternative source of supply as the market appeared reserved for Brunner, Mond Canada, Limited. The latter company, it its reply, indicated that it had not entered into any international arrangements of a restrictive character. However in view of the fact that the Canadian company is a subsidiary of a foreign corporation the Canadian market might have been reserved for it by reason of arrangements made outside Canada by the parent company.

In 1919 the United States Alkali Export Association (Alkasso) was formed among the principal producers of soda ash in the Eastern United States. One of the original members of the Alkali Association was the above-mentioned Solvay Process Company.

Commencing in 1924 and continuing until the outbreak of war the U.S. Alkali Export Association maintained various arrangements with Imperial Chemical Industries (or its predecessors) for the regulation of the export trade in soda ash and other alkali products. The arrangements became more comprehensive as time went on and in 1936 a tri-partite agreement was reached by ICI, Solvay et Cie (Belgium) and U.S. Alkali Association to allocate practically all world markets among the manufacturers in the three countries. The agreement contained the following provisions amongst others:

> "(3) Exclusive territories as follow are allotted to the parties. Each party assumes responsibility for and will count in its quota any exports from its exclusive territory.

Exclusive territories:

Solvay —Continent of Europe (excluding Russia).

I. C. I. —British Empire (excluding Canada).
Egypt and Levant.
Irak and Iran.

Alkasso —Canada.
Mexico.
Cuba, Haiti, and San Domingo.
Dutch East Indies.
Dutch West Indies (Effective 1/1/39).

(5) Joint territories as follow will be shared by I. C. I. and Alkasso in the proportions shown.

	I. C. I.	Alkasso	
China	80	20	
Japan	65	35	
River Plate	65	35	
Brazil	75	25	
Other (principally Rest of S. America Central America)	75	25	(Effective 1/1/39)
Bahrein Island	60	40	(Retroactive to 7/1/36)

(6) Each party shall use its best endeavours to prevent shipments from its exclusive market to markets exclusive to other parties and to adhere to the agreed quotas in the joint markets.

(11) In the event of either of the parties erecting an alkali works in its exclusive territory outside the U.K. or Europe, no exports to be permitted from such works to territory covered by this agreement."

The following year U. S. Alkali Export Association reached an agreement with the newly formed California Alkali Export Association to control the exports from Western States along the lines of the tri-partite arrangement of 1936. The California producers were restricted to certain markets, among which was Western Canada for which a tentative quota of 400 tons was established. The arrangements among Belgian, British and United States manufacturers would leave no scope for independent sales of soda ash and other alkali products in Canada and the relationship between Brunner, Mond Canada Limited and the Solvay Process Company in the United States would require no active participation by the Canadian company to make the arrangement effective in preventing shipments from outside sources to Canada.

Electric Lamps

The production of electric lamps in Canada and the United States is largely controlled by the General Electric Company, a United States corporation, which directly or through its subsidiary International General Electric has agreements with the principal foreign producers (in England, Belgium, Holland, France, Germany, Japan, et cetera) which provide for cross-licensing of patents, exchange of information and allocation of territory. The agreements exclude the foreign producers from the Canadian market, which is reserved for those manufacturers in Canada licensed under Canadian patents, who are likewise barred from exporting to other markets.

Canadan manufacturers of electric lamps appear to be governed by much the same type of control as to manufacture and sale as has been established by the General Electric Company in the United States. In such an important factor as the length of life, the specifications for lamp construction appear to

have been drawn up in the interests of manufacturers. Long life bulbs which have been produced in other countries, in Holland for example, are not permitted to be marketed in Canada. The nature of the control exercised by General Electric over the quality of electric bulbs in the United States is illustrated by the following instances revealed by investigations in that country.

In 1932 a General Electric engineer wrote to executives of the company:

> "Two or three years ago we proposed a reduction in the life of flashlight lamps from the old basis on which one lamp was supposed to outlast three batteries, to a point where the life of the lamp and the life of the battery under service conditions would be approximately equal. Some time ago, the battery manufacturers went part way with us on this and accepted lamps of two battery lives instead of three. This has worked out very satisfactorily.
>
> We have been continuing our studies and efforts to bring about the use of one battery life lamps....If this were done, we estimate that it would result in increasing our flashlight business approximately 60 per cent."

In 1937 a General Electric official wrote an official of the Champion Lamp Works:

> "Decision has just been made to change the life of the 200-watt 110-120 volt PS30 bulb lamp from 1000 hours design and published to 750 hours design and published."

The control which may be exercised over domestic developments is illustrated by the effect of parallel arrangements which exist in the field of fluorescent lighting. Although this form of lighting, which has qualities superior to the common electric lamp in many settings, was well known prior to 1938, its introduction commercially to North America was delayed through the control exercised by General Electric and Westinghouse. General Electric, through its subsidiary International General Electric, had agreed not to export fluorescent lamps, lamp parts and lamp machinery to countries outside the United States and Canada, while foreign lamp manufacturers in return agreed not to export such products to the United States and Canada. There was consequently no outside competition at that time to hasten the development of fluorescent lighting on this continent and, as all manufacturers in Canada and the United States were subject to the patent control exercised by General Electric, all firms were required to keep in step with General Electric, which apparently tried to slow such development down. Finally one American firm decided to risk substantial production under certain patents of its own. It was soon faced with infringement suits brought against it by General Electric, but, pending settlement of the issues, it has continued its independent course and the larger companies have also become much more active in developing fluorescent lamps.

Radio Tubes and Sets

Arrangements of a like character exist with respect to the allocation of world markets for radio sets and radio tubes. By an agreement made in 1925 between N. V. Philips of Holland (the dominant European producer) and the Radio Group (R. C. A.—International General Electric—Westinghouse) Canada was assigned to the Radio Group as part of its exclusive territory. Canadian patents on radio sets were subsequently pooled in Radio Patents Limited, while those on radio tubes were placed with a similar organization, Thermionics Limited. The arrangements for the exchange of patents and licences protect Canadian manufacturers from outside competition, while the establishment of

holding companies to control Canadian patents restricts competition among Canadian licensees. In its investigation of the radio industry in 1939 and 1940 the Tariff Board found that Canadian consumers were being unduly exploited through the arrangements then in effect. In regard to radio sets the Board reported in 1940:

> "As a general proposition, the licence to use certain patented inventions in a given receiving set of Canadian manufacture, should not entitle the holders of such patents to an amount greater than that which is collected in other countries from the use of the said patented inventions in a comparable receiving set. This principle was enunciated in the Board's 1939 Report, and while reductions in the royalty rates were made as of the 1st May, 1939, they are still too high. The Board now reiterates the suggestion made in its previous Report that the amount of royalties collected on a receiver with a given number of tube functions, broadcast bands, et cetera, would be the same in Canada as in the United States."

The Board was equally severe in its findings with respect to radio tubes:

> "The Board strongly suggests that the selling margin granted jobbers and dealers should be drastically reduced. The average mark-up on the manufacturers' selling price of 113.11 per centum is ridiculous and such a method of meeting the competition of imported, unlicensed tubes is obviously made at the expense of the consumer.
>
> Quite apart from the reduction in the selling margin, however, the Board feels that further reductions should be made in the manufacturers' selling price. Thus far, the tube companies have not put into effect the Board's suggestion that on imported tubes, the Canadian selling prices should be the United States prices plus all charges."

Until 1939 Canadian consumers were deprived of low-priced radio sets of a type which had been available in the United States for a considerable period. The immediate bar to production had been certain limitations under the electrical code but, as the specifications had been drawn up after consultation with the industry and were subsequently modified after the Tariff Board made its findings, it would appear that the restrictions were not unrelated to the limitation of competition in the Canadian market.

Under the patent rights assigned to Canadian manufacturers, production and sale of radio tubes and sets must be confined to the Canadian market. This restriction is of considerable significance in such a rapidly developing industry particularly in view of the innovations which have been brought to a practical stage by Canadian scientists during the war. Freedom to seek markets wherever they could be found might make possible an export trade in certain specialized products in this field.

Matches

Another cartel arrangement which also falls in this second class is that existing in the case of matches. The world market in matches is dominated by three firms, Diamond Match Company of the United States, Bryant and May of Great Britain and the Swedish Match Company. Agreements and intercorporate investments among the three firms have resulted in practically a complete division of markets. In 1926 a holding company, British Match Company, was formed to allow Swedish Match to participate in the control of Bryant and May at the same time Swedish Match was allotted 45 per cent of the United Kingdom market. Sales in the British Empire were allotted to Bryant and May, except in the case of India, which was given to Swedish Match. Various agreements were made to provide a share of the United States market for Swedish Match and to restrict Diamond Match and Swedish Match from competing in each other's territories.

The Canadian match industry is almost completely subject to the world-wide control exercised by the three dominant concerns. Under the direction of Ivar Kreuger, Swedish Match became more agressive during the 1920's in seeking markets in territories already allocated to others. Through an American subsidiary it acquired control of World Match Company of Canada some time prior to 1927. This led to active competition for a period among the three principal Canadian manufacturers—World Match (Swedish), Canadian Match (a joint enterprise of Bryant and May and Diamond) and the match business of the E. B. Eddy Company. As the British Empire had been assigned to Bryant and May under the arrangements among the cartel members, Swedish Match was acting contrary to its agreement in entering the Canadian market and competing with the subsidiary of the English company. Monopoly control was re-established in 1927 when the three Canadian match businesses were amalgamated in a new corporation, the Eddy Match Company, in which Bryant and May acquired almost 60 per cent of the stock and Diamond, 25 per cent. No formal agreement was necessary to secure the adherence of The Eddy Match Company to cartel arrangements, as the controlling interest of Bryant and May was sufficient to achieve this result. The policy was decided by the cartel members, outside Canada, that Canadian production should be sold only in Canada while they would refrain from exporting matches to Canada.

The merging of the three Canadian match companies in 1927 gave the Eddy Match Company a practical monopoly of the domestic market and competitive imports were barred by the policies of the dominant members of the match cartel who held the controlling interest. From time to time independent match companies sprang up in Canada but few survived for long or maintained their independence. In 1936 the Eddy Match Company acquired control of the Canada Match Company Limited which was operating a match factory in Hull, P.Q., and in 1940 Federal Match Limited, also of Hull, P.Q., was brought under Eddy control.

In order to maintain their dominant position cartel members have sought to prevent the free sale of match machinery and chemicals. In 1934 Diamond acquired control of two independent match machinery companies in the United States. In a complaint filed by the U.S. Department of Justice it is alleged that Eddy Match shared in the purchase of these companies along with Bryant and May and Swedish Match.

Chlorate of potash is the most important chemical used in match manufacturing. Prior to the war, under an arrangement between Diamond and I. G. Farben, this material was not manufactured in the United States but imported from Germany and distributed through Diamond's subsidiary, Uniform Chemical Company, not only to match companies in the United States but also apparently in Canada. When World War II broke out, cutting off supplies from Europe, Uniform Chemical Company entered into a contract with Electric Reduction Company of Canada, Limited, which had previously tried unsuccessfully to find a market for chlorate of potash, to supply 500 tons per year which Uniform Chemical Company allocates among Canadian match factories. Although the chemical is now made at Buckingham, P.Q., Canadian match manufacturers place their orders with Uniform Chemical Company in the United States.

3. Examples of Cartel Arrangements Involving Participation by Canadian Exporters

This section carries the analysis of cartels from the situation where Canadian producers are protected within the Canadian market to that where Canadian exporters have secured an agreed share of world markets by entering into cartel arrangements with producers in other countries. From the viewpoint of Canadian exporters the reasons for entering the cartel would appear to be the desire to

have an assured quota of world trade or a preferred position in certain markets free from the competition of foreign producers of like products. These results can be secured, of course, only by accepting the conditions as to division of markets and as to prices satisfactory to all cartel members. In times of depressed markets such arrangements presumably result in a higher level of prices for our export products than would otherwise be secured. Whether this produces larger additions to the national income than would otherwise accrue would depend on whether we could expand our exports sufficiently in the face of possible competition from other sources of supply to produce a larger revenue at a lower price than we could secure from taking an agreed share of the market at a higher price.

From the viewpoint of Canada's trade relations with other countries the effects of cartel arrangements have considerable significance. If the restrictions are unwelcome to importing countries they may impede friendly trade relations and lend encouragement to measures to protect national interests which prejudice our trade position. Over a period restrictions on our exports of certain products may stimulate production elsewhere so that we lose our advantage with respect to these products. These points are raised here merely as questions for which answers must be sought. We lack sufficient detailed information on the actual participation by Canadian exporters in cartels to make any comprehensive analysis of their effects in regard to our export trade. The few examples discussed below must be considered with these limitations in mind.

As Canada is one of the world's principal producers of non-ferrous metals a number of the cartel arrangements in which Canadian exporters have participated involved products of this class. Non-ferrous metals cartels have a lengthy history and have been the subject of both private and public studies. The information presented in this report in regard to such arrangements in drawn largely from these earlier studies and reports and from the replies received from Canadian companies during the present inquiry.

Copper

During the first World War, as in World War II, the consumption of copper increased enormously. High prices greatly encouraged production. When the post-war slump came the expanded capacity and surplus stocks of copper created a difficult situation. The principal American companies, controlling about two-thirds of the world production, organized The Copper Export Association under the Webb-Pomerene Act to pool surplus stocks of copper and thus prevent distress selling. They also curtailed production to about one-fifth their capacity while members outside the Association reduced by about one-half. The Association disbanded in 1923 when Anaconda Copper Company withdrew but a new organization, Copper Exporters Incorporated, was established in 1926. This cartel was international in scope comprising nearly all the important producers and dealers in the world. By 1927 its members controlled 93 per cent of American production and 84 per cent of the world output. As in the case of The Copper Export Association the output of a number of Canadian copper producers was sold through its members. American Metal, Canada, stated to be an affiliate of the International Nickel Company, was listed as a member from 1930 to 1932.

Copper Exporters Incorporated, through its New York and Brussels offices, centralized sales, allocated quotas and fixed the price of copper on world markets. It raised the price of copper on the New York market from 12·4 cents in 1927 to 21·3 cents by March, 1929. Stocks began to accumulate as buyers resisted this high price and in April the cartel announced a fixed price of 17·8 cents, which

was held until April, 1930. With depression causing consumption to slump, the cartel lost control and the price dropped to 10 cents later in 1930 and below 5 cents by 1932.

In November, 1930, American and other copper producers met in New York under the auspices of the Copper Institute to seek agreement on curtailment of production. Canadian producers were represented and each company voluntarily offered to make specific reductions in output during the following year. At a second meeting, held in December, 1931, producers were of the opinion that world production should be reduced to 26½ per cent of the estimated capacity of each mine beginning January 1, 1932. Difficulty was met in securing effective curtailment under these arrangements. A large part of Canadian production came as by-products from nickel and gold operations, while African producers pressed for larger quotas because of the dependence of native populations on the operations of copper mines. When increasing supplies of copper began to enter the United States from South America and Africa, certain American producers pressed for a protective tariff and succeeded in having a duty of 4 cents per pound imposed on imports of copper into the United States in May, 1932. This action resulted in cutting the American market off from the rest of the world and left the outside producers to deal with the remaining markets.

It was not until 1935 that producers representing about 70 per cent of world production, exclusive of United States, Russia and Japan, succeeded in re-establishing the cartel. Canadian producers did not become official members of this Chilean-African copper cartel but it was understood that they were in sympathy with the program of production control and price improvement which the cartel was attempting and would follow a parallel course in marketing copper so as not to upset the arrangement. Producers in the United States followed a policy of curtailing exports which enabled the cartel to exercise effective control on world markets. Output of participants was restricted to approximately 70 per cent of "agreed" capacities (much below estimated full capacity) from June, 1935, to July, 1936. Expanding consumption and higher prices led to increases in agreed quotas during 1936, and in January, 1937, all restrictions on output were removed. This contrast with the policies of earlier copper cartels may be mainly attributed to the fact that the Chilean-African cartel had direct control of only about 70 per cent of production outside the United States and it had to keep constantly in mind the possibility of unrestricted production by Canadian and other outside producers, including those in the United States. Restrictions on output were reimposed by the cartel for part of 1938 and again in 1939, but on the outbreak of war the agreement was suspended.

The control of the exports of refined copper from Canada is concentrated in two subsidiary companies. The American Metal Company of Canada, Limited, a subsidiary of The American Metal Company, Limited, with offices in New York, acts as sales agent for the entire copper production of The International Nickel Company of Canada, Limited, while The British Metal Corporation (Canada) Limited acts in a similar capacity with respect to the production of the only other Canadian refinery. The fact that imports of refined copper into Canada have been subject to a tariff duty has enabled these principal sales companies to charge Canadian users of copper a higher price than that secured from the sale of refined copper on world markets.

The production of refined copper in Canada, stimulated by demands during World War I, provided an opportunity for the development of industries producing semi-manufactured copper products for which export markets also had to be secured. United Kingdom copper manufacturers were substantial

buyers of copper bars and rods from Canada and from these produced copper products similar to those being produced in expanding volume by the growing copper manufacturing industry in Canada. Both groups of manufacturers enjoyed preferential tariff rates in a number of Empire markets in comparison with producers in other countries. From 1935 on arrangements were made by the principal British and Canadian manufacturers of copper products covering the products in which both groups were interested. As described by one Canadian company "these arrangements were, generally speaking, restrictive, without being prohibitive, as regards the sale by us of our products in Great Britain and most other parts of the British Empire, and the sale by the British manufacturers of their products in Canada." In the main they provided that Canadian producers would restrict their direct sales to Canada while the British manufacturers would confine their sales to the United Kingdom and certain other parts of the Commonwealth. Each group appointed the members of the other as agents for any sales made in the other's territory.

Lead

International cartels among producing and trading firms in the lead and zinc fields had operated prior to the first World War when, as the U.K. Committee on Trusts pointed out in 1919:

> "The world's trading and industry in a number of . . . basic metals were largely controlled before the war by a powerful group of German interests, operating in conjunction with, but dominating local financial interests in a number of countries. The centre of this combination was the Metallgesellschaft of Germany, with which were affiliated through stock holding the Merton Metallurgical Co. and the American Metal Co.
>
> . . . . Dominated by these German interests were (1) the Lead Convention, including all the principal producers of soft pig lead, which was formed in 1909—the selling of soft pig lead was handled by the Metallgesellschaft on the Continent, and the Merton interests in the United Kingdom; and (2) the Spelter Convention, also formed in 1909."

After the war a price agreement among producers in Mexico, Australia, Canada, Germany and France is reported to have been reached, in 1921, and to have been effective for about 18 months. According to the evidence of Mr. Francis H. Brownell, American Smelting and Refining Company, before the Temporary National Economic Committee, a quota was allotted to each producer joining in the arrangement and any member who exceeded the allotted tonnage had to purchase an equivalent tonnage from a member who was undersold.

No other attempt at joint regulation appears to have been made until 1929 when the Lead Sales Pool was established by producers in Australia, Mexico, Burma and Canada. The object of the pool was the sharing of lead sales in Europe and the Far East. The pool provided for the fixing by the producers of selling prices in the Far East, the prices from time to time being based on London Metal Exchange quotations. Sales were shared in agreed proportions among the members.

The members of the Lead Sales Pool controlled between 30 and 40 per cent of world production but a much larger proportion of world exports. The onset of the depression led to the formation in 1930 of the Lead Producers Reporting Association for the exchange of statistical information. In May, 1931, the members undertook to make an effort to lower the rate of production owing to the heavy falling off of consumption brought on by the depression. Production was reduced by ten to fifteen per cent by all members of the Association for a period of about six months, when the agreement was abandoned partially on account of

a change in marketing conditions for some of the members brought on through the imposition of import duties into the United Kingdom. The Association was dissolved in February, 1932.

The Lead Sales Pool was also terminated in February, 1932, as the imposition of the import duty on non-Empire lead by the United Kingdom brought about trading conditions radically different from those under which the Pool had been designed to operate.

Efforts at formal re-establishment of a cartel were not successful during the depression although lead producers are reported to have agreed in July, 1935, not to increase production without giving due notice. In 1938, the same groups who had participated in the Lead Sales Pool along with producers in Argentine and Yugoslavia reached agreement to form the Lead Producers Association. Effective the 1st October, 1938, all the producers reduced their productions of lead by ten per cent of their previous rates, and the stock of lead in the hands of producers in excess of a total of 150,000 tons was blocked and withheld from sale. It was provided that cuts in production would be discontinued when the London Metal Exchange price of lead exceeded £16, or when stocks in the hands of producers fell below 150,000 tons. The agreement was suspended on the outbreak of war in 1939.

The operations of the Association were described by Mr. Brownell in the T. N. E. C. hearings, speaking for the Mexican mines controlled by his company:

> "The arrangement was this: whenever on the London Metal Exchange . . . the price of lead, the average price of spot and future, remains below £15 for a period of 20 market days in succession, automatically we put in a 5 per cent reduction of production and in lieu—if it were impossible, as it often was, to change our mine production, then we agreed to hold that amount of refined lead off the market indefinitely, only to be sold when lead arose about £17 or £16—only a pound variation. . .
>
> With every increase of one pound we released 5 per cent of the previous reduction of production."

The essence of the arrangement was to fix a floor below which the price of lead would not fall. Although the agreement was in effect for a relatively short period the restriction of production in 1938 appears to have prevented any substantial breach of the floor price agreed upon.

Zinc

Prior to the first World War the zinc industry was dominated by smelting interests in Germany, Belgium and France. Joint regulation by European producers was attempted as early as 1885. With some periods of competition and several reorganizations the International Zinc Cartel survived until 1914. The war cut off the continental smelters from the rest of the world and led to a great increase in productive capacity outside continental Europe. Efforts to revive the International Zinc Syndicate in the immediate post war period proved unavailing but late in 1926 the Electrolytic Zinc Association was formed to secure and maintain a premium for high-grade zinc over the ordinary grade commonly known in the United States as 'Prime Western'. Prior to the introduction of the electrolytic method of producing zinc, there was an established premium for zinc of a higher grade than 'Prime Western'. This premium was easily maintained owing to the then limited output of the higher grades of zinc. However, after the United States, Australia and Canada commenced the production of electrolytic zinc it was found that export markets could not absorb their total production as high-grade. At that time zinc was used mainly for galvanizing, and ordinary zinc containing substantial impurities was preferred for this work and was in abundant supply.

The members of the E. Z. A. agreed that at times when it was difficult to maintain the premium on electrolytic zinc a portion of the production should be debased to ordinary grade level. One of the members of the Association was chosen to produce and market the lower grade on the understanding that all export sales would be pooled for an equitable division as to prices. In 1929 it was found necessary to include in the Association new producers of electrolytic zinc in Poland and Norway. The enlarged Association continued with a certain amount of friction until the end of 1931 when it was dissolved principally on account of disagreement about the division of the European market.

The formation of the Electrolytic Zinc Association was followed in May, 1928, by the establishment of the European Zinc Cartel among producers of standard zinc. In September, 1928, members of the European Zinc Cartel reached agreement to restrict production if the price on the London market fell below £24. This agreement remained in effect until the end of the year but in spite of the fact that the price remained above £24 stocks of zinc showed a marked tendency to increase. A new agreement became effective in January, 1929, which provided for closer co-operation among European producers, the restriction of Canadian and Australian exports, and a limitation of production if the price fell below £27 per ton. The agreement suffered from serious handicaps in that it was subject to renewal every three months and did not include electrolytic producers. This insecure basis resulted in the cartel being dissolved at the end of 1929.

Attempts to revive the cartel failed in 1930 but in the following year agreement on a wider basis was reached in the International Cartel of Zinc Producers which was formed in July, 1931, the members being producers of zinc in Belgium, France, Poland, Germany, England, Australia, Mexico and Canada. Agreement was reached for the control of production, and production was reduced by varying percentages from time to time. Production quotas were based on the highest quarterly output of each member in the period 1927 to 1930, with special allowances for certain new plants. A restriction to 45 per cent of capacity was then put into effect which was later raised to 50 per cent and then to 55 per cent.

Production quotas were adjusted in 1933 to prevent a break-up of the cartel but the imposition of a 10 per cent duty on non-Empire zinc by the United Kingdom and the establishment of a premium on the production of domestic zinc by Germany created difficulties which could not be surmounted and the agreements were not extended beyond 1934.

The world cartel in zinc was not revived before the outbreak of World War II but early in 1939 a special agreement was made between Empire zinc producers and smelting interests in the United Kingdom as part of an arrangement to maintain the smelting industry in the latter country.

In May, 1939, the British Government changed the duty on foreign (i.e., non-Empire) zinc entering the United Kingdom from 10 per cent ad valorem to 30s. per long ton. The zinc producers in Australia, Rhodesia and Canada then entered into an agreement with the Imperial Smelting Corporation of England which provided for the payment by the overseas producers to the Imperial Smelting Corporation of a subvention on the tonnage of zinc sold by the overseas producers in the United Kingdom. The overseas producers also agreed to pay rebates to exporters of zinc from the United Kingdom based on the amount of zinc contained in exports of goods in which the cost of zinc is an important consideration. The agreement provided that the production of zinc metal by the Imperial Smelting Corporation should not exceed

60,000 long tons per year. However, the overseas zinc producers agreed that the Imperial Smelting Corporation might produce up to 117,000 long tons per year during the war under certain conditions.

The Empire Zinc Agreement was designed as a means of protecting the relatively high-cost British smelting industry. In effect, the arrangement subsidized the Imperial Smelting Corporation through increased prices paid by consumers in the United Kingdom.

Nickel

The International Nickel Company of Canada Limited has held a predominant position in the world nickel industry since World War I, supplying from 80 per cent to 90 per cent of the world's demands for nickel in the period between the two World Wars. It is a private international organization in itself with properties and plants in Canada, United States and Great Britain. The first International Nickel Company, an American corporation, was formed in 1902 to amalgamate the nickel operations of The Canadian Copper Company, operating mines and smelters in the Sudbury region and the Orford Copper Company which refined the nickel ore in the United States. In 1925 International Nickel acquired the British American Nickel Corporation which had been sponsored by the British Government during World War I in an effort to increase production of Canadian nickel but which only operated for two years. In 1928 International Nickel and Mond Nickel Company, which until then had divided the natural monopoly of the Sudbury basin between them, were merged into the International Nickel Company of Canada and thus created a practical commercial monopoly to accompany the physical one. International Nickel has since maintained a policy of a fixed price for nickel in American funds and its sales and distribution policies appear to have been accepted by the few other minor nickel producers.

The only other producer of nickel in Canada of any consequence is the Falconbridge Nickel Mines Limited, which began production in 1931. Its output has been much smaller than that of International Nickel. Up to the invasion of Norway the Falconbridge Company treated its ores at its Norwegian refinery where 20 million pounds of nickel were produced in 1939 compared with total production of 200 million pounds of nickel from Canadian ores. Falconbridge appears to have sold its nickel outside the arrangements established by International Nickel and principally to customers in Europe. The smaller company could rely, however, on the price maintenance policy of the dominant company which has held the price of nickel in the United States at 35 cents per pound during boom and depression since 1926. International Nickel has maintained a somewhat higher price for sales in Europe and as the Falconbridge company disposed of practically all its production in the European market it secured the advantage of this price differential.

Steel

The first international steel cartel was formed in 1926 although agreements among producers in various sections of the industry had operated from time to time over a considerable period. Producers in Germany, France, Belgium, Luxembourg and the Saar were the original members, but producers in Austria, Czechoslovakia and Hungary joined in 1927. This left Poland, United Kingdom and the United States as the main outsiders, but producers in the United Kingdom and the United States participated in certain related cartel arrangements, as in the case of steel tubes and rails. The international steel cartel established production quotas for crude steel with penalties or compensation for members exceeding or falling below quotas. The decline in demand during

the early stages of the depression led to dissatisfaction with quotas and production control lapsed in February, 1930. Steel was regarded in European countries as an essential product for military defence and there were direct and indirect efforts by governments to maintain steel production and even increase producing capacity in spite of the depression. A new agreement among steel producers was not reached until June, 1933, when a system of export quotas was substituted for production control. Minimum prices were established for exports and agreements made as to the reservation of domestic markets. Producers in the United Kingdom joined the cartel in 1935 and the principal American groups followed in 1938. A London committee was set up with representatives of Continental, United Kingdom and American groups to administer the cartel arrangements and to work in conjunction with the various product committees. Although the cartel undoubtedly influenced both the import and export trade of Canada in a wide variety of steel products we have obtained information with respect to only two groups—steel rails and tubes.

Steel Rails.—International agreements among producers of steel rails long antedate the international steel cartel of 1926. One of the earliest cartels was the International Rail Makers' Association which was first organized in 1883 among the producers in Great Britain, Germany and Belgium. There have been a number of periods in the long existence of the association during which the arrangements have broken down, but new producers have been taken in and quotas adjusted to enable a new agreement to be reached.

After the first World War there was intensive competition for a period but the cartel was re-established in 1926 in Germany, France, Belgium, Luxembourg and the United Kingdom. A new agreement was made in 1929 when the chief rail makers in the United States became parties through the Steel Export Association. Domestic markets were reserved to the national groups and export orders were centralized in a committee in London which distributed the business among the participating groups according to the quotas allotted and at the prices fixed. The agreement was renewed in 1935 for a period of five years but was suspended on the outbreak of war.

The two producers of steel rails in Canada, Algoma Steel Corporation, Limited and Dominion Steel and Coal Corporation, Limited, were not official members of the cartel. As Canada is among the smaller steel producers it could not be expected that Canadian mills would be permitted to pursue for long an independent course with respect to exports. In 1937, a period of strong demand, one of the Canadian producers made some export sales on an independent basis but subsequently both Canadian firms were offered and accepted some export orders out of the quota assigned to United Kingdom rail makers. This action by a cartel member was apparently intended to prevent any competition by Canadian plants in controlled markets.

Pipes and Tubes.—The origin of the International Tube Cartel may be found in the German Steel Tube combine which antedated the first World War and which, in 1905, established an understanding with certain United States manufacturers to share export markets. In 1926 continental tube producers reached an agreement to control both domestic and export sales. Adherence of the principal producers in the United Kingdom was secured in 1928 and of American mills after the formation of the Steel Export Association of America in 1929. The agreement between the Continental group and other producers, which was to run to March, 1935, provided for the reservation of domestic markets and allocation of export quotas. The principal Canadian producers of pipe became parties to the arrangements along with British and American producers.

The International Tube Cartel has been described by one Canadian company as follows:

"Prior to the outbreak of hostilities we were members of the International Tube Cartel. This Tube Cartel was formed in the year 1929 and was dissolved in the year 1935. The countries included in this Tube Cartel were:

Belgium	France	Great Britain	Germany
United States	Poland	Canada	Roumania
Hungary	Sweden	Czechoslovakia	Austria

in fact, all countries in the world, where tube manufacturing plants were established.

Under such all-inclusive arrangement it would have been impossible for a small producer like Canada to stay out of such a cartel and expect its export business to survive. This was borne out by the experience of this Company after the dissolution of the foregoing Tube Cartel in 1935. During the next four years, and until the outbreak of the present war, the export sales of our mills were drastically reduced in volume.

During the operation of this International Tube Cartel Canadian pipe makers were allocated 3% of the world's tube tonnage. This allocation was only obtained after a tense struggle and is in excess of the tonnage which Canada could sell for export under normal peacetime conditions with free and unrestricted competition."

The International Tube Cartel embraced a number of agreements affecting different classes of products and providing special arrangements for particular markets. Canadian producers appear to have agreed to restrict their production to particular sizes and classes of pipes and tubes in return for protection in the domestic market. In its report on boiler tubes in 1934 the Tariff Board found:

"Seamless boiler and similar pressure tubes are now being produced in Canada, in commercial quantities, only in sizes varying from 2½ inches to 4 inches outside diameter . . . In respect of all sizes in his present production, the applicant is more than sufficiently protected from British competition by a selling agreement."

Although the formal agreements lapsed in 1935 the International Tube Cartel maintained an informal existence through understandings among the former members to respect the reservation of domestic markets to the national groups. In the T.N.E.C. hearings held on November 15, 1939, Mr. S. M. Bash, a member of the Board of Managers, The Steel Export Association of America, gave the following statement in regard to international agreements in operation prior to the outbreak of war:

"Prior to that time the ones that were working successfully were the rail group, the tin plate group, and pipe, although we didn't have an international agreement on pipe."

The reservation of the Canadian market for certain classes of pipes and tubing to Canadian manufacturers has given rise from time to time to protests by users of such products who found themselves unable to secure quotations on supplies from producers in the United Kingdom or the United States. The reservation of the Canadian market appears to have been respected even after the formal dissolution of the International Tube Cartel and it has been represented by some users that this enabled prices of pipes and tubing to be maintained at prices higher than would have prevailed if supplies could have been secured from sources outside Canada.

Aluminum

The aluminum industry throughout the world has been dominated by a small number of firms since it became of commercial importance toward the close of the nineteenth century. The first cartel was formed in 1901 and the latest, and most effective, Alliance Aluminum Company of Basle, was set up under an agreement made in 1931 and renewed in 1936. The present Canadian producer, Aluminium Limited, or its predecessors entered into each cartel. Aluminium Limited was formed in 1928 and received from the Aluminum Company of America practically all its foreign properties in return for common stock, which was then distributed to shareholders of Alcoa. The new Canadian company, Aluminium Limited, became a member of the Alliance Aluminum Company of Basle with a production quota of 28.58 per cent, compared with 21.36 for the French producer, 15.42 for the Swiss, 19.46 for the German and 15 for the British. Aluminum Company of America was not a party to the cartel arrangement, but it seems to have been accepted that Alcoa would not upset the market outside the United States while the cartel arrangement would preclude any competitive sales in the American market.

The control of the world trade in aluminum was to be achieved by the Alliance through three devices:

(*a*) by fixing an Alliance buying price at which it would purchase aluminum from any member producing within its quota;

(*b*) by regulating the production quotas of its members, thus protecting itself against actually having to buy raw aluminum at the price fixed under (*a*);

(*c*) by holding surplus stocks off the market (the 1931 agreement provided for the purchase, at a stated price, of surplus stocks in the hands of members).

The mechanics of operation were as follows: at the outset Alliance took over from its shareholders at an agreed price all their stocks of metal in excess of a uniform tonnage per Alliance share held. It also agreed to purchase ingot from its shareholders at the same price and it fixed periodically production quotas for the various shareholders. The original price was £55 per ton. Clearly this agreement was intended to limit competition, restrict output and thus fix a minimum price. In effect the Alliance buying price set the minimum world price for aluminum ingot. In 1936 the agreement was modified and a system of royalties was substituted for the system of fixed quotas. Each shareholder was to have a free quota for every share held but had to pay a royalty graduated progressively upward as its excess production exceeded its free quota, for all tonnage in excess of the quota. These royalties Alliance paid out on the shares. After 1938, when war demands for aluminum expanded beyond existing capacity, the need for restrictive agreement disappeared, but Alliance remained in existence.

The relations between Alcoa and Aluminium Limited and their relations with the Alliance were subject to exhaustive examination during the extended antitrust proceedings taken against these companies in the United States and which were finally disposed of in a judgment of the United States Circuit Court of Appeals in March, 1945. Aluminium Limited was found to have engaged in a cartel agreement limiting prices and dividing markets in a manner contrary to American law and was to be enjoined from entering into any cartel or agreement similar to that of 1936 covering imports into the United States. In connection with the present inquiry Aluminium Secretariat Limited has indicated that, pursuant to resolutions adopted by its Board of Directors on May 17, 1945, Aluminium Limited formally denounced agreements with other share-

holders of Alliance Aluminum Cie. which affected the latter company and which might still be considered as having remained in existence, and also called for the dissolution of the Alliance under the provisions in its by-laws providing for six months notice. We have been further informed that the Alliance is taking steps which may lead to its dissolution at an earlier date.

During the war world production of aluminum is estimated to have more than doubled. Between 1939 and 1943 Canadian production is stated to have risen from 82,000 tons to over 490,000 tons. Production in the United States in the same period was scheduled to increase from 163,000 tons to about 800,000 tons. A large part of the expanded productive capacity on the North American continent has been financed directly or indirectly by the United States Government. It is apparent that, until civilian uses for aluminum have been developed on a much greater scale than prevailed in the pre-1939 period, there will be very great excess capacity in the industry. At the same time it is likely that most countries will consider it necessary from the viewpoint of national defence to provide for some measure of aluminum productive capacity within national boundaries. In view of the monopolistic character of the aluminum industry in most producing countries and the national interests involved, some positive form of intergovernmental action may be required in this field in the post-war period to avoid undue restriction of production by more efficient plants through understandings between dominant firms or efforts by individual states to protect high-cost manufacturers.

Acetic Acid

Acetic acid is one of the most important chemicals used in industry. It is the basic chemical for one of the forms of artificial silk made in Canada. It is also used in the manufacture of solvents and for other industrial purposes. Acetic acid was first produced commercially through wood distillation but during World War I synthetic acetic acid was produced successfully by one of the predecessors of Shawinigan Chemicals Limited. After the war the company sought commercial markets for the greatly expanded capacity and found outlets for substantial quantities in the United Kingdom and the United States. Its position in the United Kingdom was strengthened in 1921 when acetic acid was classed as a protected product under the Safeguarding of Industries Act with an Empire Preference of $33\frac{1}{3}$ per cent.

According to evidence given to Congressional committees in the United States, exports by Shawinigan Chemicals Limited to that market were threatened by possible development of acetic acid plants in the United States. To meet this potential loss of markets the Canadian company entered into an agreement with the Union Carbide Company and another American firm which later became controlled outright by du Pont, to establish a joint company, Niacet Chemicals Corporation. This jointly owned corporation then began the production of acetic acid in the United States using the processes developed by Shawinigan Chemicals.

In the meantime Shawinigan Chemicals had endeavoured to protect its position further in European markets by entering into agreement with The Distillers Company and ICI of England and Essigsaeure-Gesellschaft, an I. G. Farben subsidiary, as part of the world acetic acid cartel.

In 1931 the production of acetic acid by Jasco (Joint American Study Company), a joint Standard Oil—I. G. Farben chemical company in the United States, seemed likely to disturb Niacet's position as the dominant producer of acetic acid. The danger was removed by an arrangement between Jasco and

Niacet whereby the latter became the sales agent for Jasco's production and later, at the instance of I. G. Farben, Jasco decided to abandon production of acetic acid in order to avoid possible conflict with du Pont and Union Carbide.

Radium

The great strides made in radio-therapy and also in the industrial uses of radium have made this rare element a matter of much public concern. The first radium produced by Mme. Curie was from pitchblende mined in Bohemia. The Austrian Government established a government monopoly of the production of radium. The Bohemian mines remained the principal source of radium until carnotite deposits in the United States were successfully exploited after 1912. From then until 1923 United States radium companies were dominant and the price of radium was maintained at about $170,000 per gram. Following the first World War the price was about $105,000 to $120,000 per gram but even this price served to put radium treatment beyond the means of most cancer sufferers.

It was about this time that a Belgian mining company, Union Minière de Haut Katanga, began to develop high grade ores discovered in connection with copper explorations in the Congo. By 1923 the Belgian company was in a position to compete with the American producers and the price of radium dropped steadily until a level of about $70,000 per gram was reached. This was supposed to be about the American cost of production and, as the Belgian company appeared ready to go lower, the American companies ceased production, some of them then becoming sales agents of the Belgian company.

Although it was believed that the cost of producing radium from Congo ores was less than $70,000 per gram, the Belgian company maintained this price until radium became available from the pitchblende deposits discovered at Great Bear Lake in the Northwest Territories about 1931. Strong competition developed between Elorado Gold Mines Limited, the Canadian producer, and the Belgian company. By 1938 the price had dropped to between $20,000 and $25,000 per gram. There is no open market for radium, sales usually being based on individual tender and contract. Reports that the Canadian and Belgian companies had come to an agreement to avoid further competition became current in 1938. A release issued by the Bureau of Mines in March, 1940 contained the following:

> "An agreement was recently reported as reached between Eldorado and Belgian companies for sharing world sales on a basis of 40 per cent by the former and 60 per cent by the latter, the agreement to run for a term of 5 years; the price level is not divulged."

The intervention of the war shortly after the agreement was reported to have been concluded gave little time for its effects to become apparent. In January, 1944, the Canadian company was expropriated for war purposes by the Dominion Government and a Crown company was established to carry on its operations.

At each period of radium production monopoly control has been dominant. In the first stage of commercial production the American producers kept the price at $100,000 to $170,000 per gram although the cost of production was reported as being about $70,000. Then the Belgian company for a decade following 1924 held the price at about $70,000 per gram, a price which would keep American producers out, but apparently much higher than its actual costs of production. Finally the development of high-grade ores in Canada led to active competition and a reduction of price by 1938 to less than $25,000 per

gram. Until recently secrecy has necessarily surrounded wartime developments in this field but the disclosure of the production of the atomic bomb leaves no possibility of a return of radium production to the control of a private cartel.

Newsprint

Although newsprint is included in this section dealing with international agreements affecting the export of Canadian products, it should be mentioned at the outset that the information we have received indicates that the control of newsprint, so far as Canada is concerned, has been entirely a domestic arrangement among Canadian mills undertaken initially at the instance of certain provincial governments. On occasion various groups of Canadian newsprint companies have entered into co-operative sales arrangements involving the use of common sales agents in outside markets or the participation in joint contracts with groups of newsprint users. These arrangements, so far as we have been informed, did not involve understandings with newsprint producers in other countries.

Since 1913 Canada has led the world in the export of newsprint. More than three-quarters of Canada's shipments go to the United States. For many years pulp and paper held first place among Canadian industries and its products held the same rank in our export trade. The industry has been closely related to the United States through capital investment as well as by the fact that more than half of the newsprint consumed in that country comes from Canadian mills.

Between 1925 and 1930 the capacity of Canadian newsprint mills doubled, while the consumption of newsprint in the United States increased only 20 per cent. During this period International Paper Company, a leading newsprint company in both the United States and Canada, generally took the initiative in establishing prices for newsprint and its leadership was largely accepted by other companies in Eastern Canada. The production of newsprint necessitates heavy investment in timberland and mills and these over-head costs influence each producer to increase production so as to decrease unit costs. The demand for newsprint is relatively inelastic and each producer realizes that an attempt to increase tonnage by reduction in price is likely to be met by matching or retaliatory price reductions by competing newsprint mills. Neverthless the pressure of new productive capacity during the late twenties led to a downward trend in prices and to attempts to stabilize the market on the part of Canadian producers. Although three corporations—Consolidated Paper Corporation, Abitibi Power and Paper Company and Canadian International Paper Company (subsidiary of International Paper and Power Company)—constituted almost 50 per cent of the Canadian newsprint industry, this concentration of production was matched in some degree by the position held by large United States buyers of newsprint, such as the Hearst papers. Newsprint is commonly sold on annual or longer term contracts and the offer of contracts for substantial tonnage gives buyers a strong bargaining in times of surplus capacity.

In 1927 the Canadian Newsprint Company was formed to handle sales of 14 mills with about 50 per cent of the Canadian capacity. International Paper did not join the group, which pooled orders and allotted tonnage among the member mills. Attempts were made by the group to effect a joint contract with the Hearst papers but two member companies broke away and signed individual contracts and the group dissolved. International Paper then renewed its leadership.

The following year, 1928, the Newsprint Institute was organized at the instance of the Premiers of Ontario and Quebec. It included all mills except International Paper and certain mills controlled by American publishers, and

controlled about 70 per cent of the Canadian capacity. The following statement about the Newsprint Institute was made to the Federal Trade Commission of the United States in 1929 by George H. Montgomery, K.C., its general counsel:

> "The manufacturers were accordingly called together and were addressed by the premiers who informed them that they would have to make some provision for the distribution of the available tonnage on an equal basis so as to afford some measure of employment to all the mill communities as well as to those engaged in the cutting operations incidental to them. The available business was at the time very unevenly distributed so that the premiers' mandate involved the necessity of the mills which were long in business giving up a portion of it to those who were short in order to put them on an equal footing, and this met with great resistance and was naturally only acceded to by the longs under governmental pressure.
>
> The distribution of the business necessarily involved provisions for adjustment so that each mill would receive the same mill net for the tonnage manufactured."

In the fall of 1928 International Paper bid for a Hearst contract at prices lower than those previously announced for 1929. Considerable pressure was exerted by the Premier of Quebec to have the contract revised and a higher price was finally accepted by both parties. Attempts were then made to have the price of newsprint increased for 1930 but some mills broke away and this ushered in a period of demoralized markets and secret price cutting. By 1933 the price of newsprint was down to $41 per ton compared with $62 in 1929 and mills were operating at about 55 per cent capacity. The Newsprint Institute dissolved, to be followed by the Newsprint Association of Canada, which lasted less than a year. In 1933 the Newsprint Export Manufacturers Association of Canada was formed to co-operate with the N.R.A. Code authority in the United States, but its operations in this respect were short-lived. In 1936 its name was changed to the Newsprint Association of Canada.

Between 1934 and 1936 various efforts were made by the Premiers of Ontario and Quebec to prevent any great shifts in tonnage among the mills which would lead to some mills operating at near capacity while others would be forced to close down. Finally in February, 1936, a policy of joint action was agreed upon by the two provincial governments. An independent committee was set up to establish capacity ratings for the mills and a system of prorating tonnage was worked out and put into effect in January, 1938. The details of the arrangements were not made public by the provincial governments or the industry but it would appear that the governments did not attempt to determine the price of newsprint. However, when available tonnage is prorated among the mills, there is little incentive to break out of line.

In 1937, International Paper re-established its price leadership with some difficulty, as the Great Northern Paper Company in the United States continued to take an independent position and thus increased the pressure of publishers for concessions in price from Canadian mills. In December, 1937, International announced an increase of $7.50 per ton, bringing the price to $50. Later it was considered that this sharp advance was a mistake as it encouraged publishers to stock up heavily, thereby adding to the decline of sales in 1938 and it allowed American and European mills who were willing to sell below $50 to increase their business at the expense of Canadian mills.

Co-operative efforts of Canadian paper manufacturers to control production and price of newsprint are closely watched in the United States both by government and by newspaper publishers. In 1929 an investigation was made by the

Federal Trade Commission pursuant to a Senate resolution which directed the Commission to ascertain whether the practices of the manufacturers and distributors of newsprint paper tended to create a monopoly. The Federal Trade Commission recommended in its report in 1930:

> "That the future activities of the Newsprint Institute of Canada in relation to the sale of newsprint paper and the fixing of the market prices in the United States be watched closely with a view to remedial action if any agency is found to exist or is created within the United States for the enforcement of such activities as may be contrary to the antitrust laws of the United States."

The restrictive arrangements which were developed in the Canadian newsprint industry in the decade prior to the outbreak of war were evolved to meet the threatened bankruptcy of the industry and the demoralized market situations created by the addition of new capacity at a time when consumption was declining.

The force of competition in the industry was such that the successive attempts at private agreement were unsuccessful. Intervention by the provincial governments of Ontario and Quebec was intended to distribute *employment* more evenly among the mills and to avoid the destitution and demoralization which results in isolated mill communities when the mills on which they are dependent are shut down. Incidentally it assisted the producers in maintaining prices somewhat above the level to which they might have fallen. But it involved only minor restriction on the total production or total exports of the Canadian industry. Competition from producers in the United States and Newfoundland, and potential competition from Europe and from southern pine, as well as continuing competition between Canadian producers, made the arrangements much less harmful to the consumers than the irritation which developed suggests. The most serious danger appears to have been to the Canadian producers, for, as Mr. Charles Vining, President of the Newsprint Association of Canada and an advocate of prorating, has pointed out, the policy is negative rather than positive and in his opinion it must be accompanied in the paper industry by "energetic competitive measures" in other directions. He has suggested that the security and stability brought about by prorating, in the absence of any such other measures, may lead to complacency as individual manufacturers rely on tonnage allotments as their means of obtaining business and may not maintain an adequately aggressive sales effort.

The rigid tonnage allocation among newsprint producers set up by the system of "prorating" sponsored by the provinces of Ontario and Quebec would be unacceptable under the terms of any international agreement to eliminate restrictive practices, and would invite attention under almost any international agreement for the mitigation, investigation or control of such practices. This would also be the case with similarly restrictive arrangements in which Canadian exporters of other commodities might participate. The proration system was a product of depression and would be unnecessary, perhaps impracticable, in prosperity, but if the problem of surplus capacity in the newsprint industry became acute once more it would be extremely difficult to avoid a return to some concerted measure of restriction by the provinces of Ontario and Quebec. Under such conditions, and if an international convention on cartels were in force, it might be necessary to attempt some agreement with the Government of the United States, as representing the main consumer, along the lines of the "intergovernmental commodity agreements" which appear to be envisaged as the solution to the problem of temporary demoralization in basic industries.

International agreements among paper producers, in which Canadian mills have participated, have related to products other than newsprint. In the latter part of 1932 the principal manufacturers of kraft paper in the Scandinavian countries, representing approximately 95 per cent of the output, formed an association, known as Scankraft, to control the sales of member companies. It appears that Scankraft then made certain arrangements with British paper makers to divide the United Kingdom market. As Canadian producers were also interested in the British market as well as desirous of heading off any serious competition by Scankraft in the Canadian market they made arrangements with Scankraft in 1935 under which the latter would regard the Canadian market as reserved for Canadian mills while European markets other than the United Kingdom would be accepted as Scankraft territory. In the United Kingdom Canadian mills were to be permitted to make shipments up to certain agreed tonnages at prices uniform with those quoted by Scankraft.

The foregoing examples give a fairly accurate indication of cartel arrangements involving participation by Canadian producers, though complete accuracy in detail would be possible only after a more intensive inquiry in each case and then only if full records were available. In participating in such arrangements Canadian exporters are given protection against competition in price at home and abroad, but in order to secure such protection they must give up the right to determine freely to what markets and under what conditions they may ship Canadian products. The price obtained for products sold under cartel arrangements is presumably higher than would otherwise be obtained on world markets, and the net returns received by Canada for the goods exported will also be larger. However, the volume of our trade may be limited by the cartel so that expansion of Canadian industries may be slower than it would be if exports were made without restriction. The conditions imposed by the cartel agreement may run counter to Canadian trade policy, but if our exporters are to secure the advantages they see in the agreement they will be forced to follow the policy adopted by members of the cartel rather than Canadian government trade policy. These considerations apply to exports, but cartel arrangements, as we have seen, apply to domestic as well as export markets. The elimination of competition from abroad, either through the reservation of the Canadian market to firms in this country or by agreement as to price, leaves Canadian consumers no alternative but to pay the price fixed by the cartel members and to accept whatever products are permitted in the Canadian market. In some cases where the product is being exported, the price in Canada may exceed the export price and may even be equal to the price fixed in the principal world market plus the transportation charges to Canada. It is dangerous to have such power of discrimination subject only to the discretion of private interests.

II

INTERNATIONAL AFFILIATIONS OF CANADIAN COMPANIES

Financial investment by nationals of one country in another country, either by way of direct investment in business undertakings or by the purchase of securities, has been a dominant feature in capitalistic development. Nowhere has this flow of investment been more apparent than in the case of Canada. The close historic relationship with the United Kingdom, which was the dominant capital exporting country for such a lengthy period, as well as the physical proximity of the United States, have provided the background for an inward and outward movement of capital investment which has few, if any, parallels among any other groups of countries. It is estimated by the Dominion Bureau of Statistics that at the end of 1939 the total British and foreign capital invested in Canada had a book value of $6,941 million of which $2,475 million represented British-owned investments along with some investments held in the United Kingdom for overseas owners, and $4,188 million was the amount owned or held in the United States. In the same year Canadian investments abroad, exclusive of the investments of insurance companies, banks and governments had a value of $1,374 million of which $878 million represented investments in the United States. In the case of outside investments in Canada as well as Canadian investments abroad, a large part consists of investments in fixed interest-bearing securities of governments, railways and other public utilities. These do not generally involve business arrangements of the type coming within the field of the present study. However, investments in manufacturing and merchandising establishments or in mining and other extractive industries may result in inter-company arrangements directly or indirectly related to or forming a part of private trade agreements of the kind with which this study is concerned.

On the basis of data compiled by the Dominion Bureau of Statistics for industrial and commercial concerns the following totals may be given for American controlled and affiliated companies in Canada at the end of 1939:

Classification	Companies Controlled in United States		Total Investment in all Companies in Canada	Companies Controlled in U.S. as percentage of total
	Number	Total Investment		
	(money figures in millions of dollars)			
Manufacturing Companies—				
Vegetable Products	92	104	539	19
Animal Products	45	48	250	19
Textiles	55	22	347	6
Wood and Paper Products	123	303	961	32
Iron and its Products	214	203	698	29
Non-ferrous Metals	115	143	185	77
Non-metallic Minerals	58	169	291	58
Chemicals and Allied Products	220	117	172	68
Miscellaneous Manufactures	53	22	41	54
Totals, Manufacturing Companies	975	1,130	3,484	33
Mining and Smelting Companies	69	311	822	38
Utility Companies	109	634	5,499	11
Merchandising Companies	412	125	2,094	5
Grand Totals, Industrial and Commercial Companies	1,565	2,200	11,899	18

In the same year, 1939, there were about 132 manufacturing concerns in Canada which were controlled in Great Britain and represented a total capital investment of $194 million.

In a study "Canadian-American Industry" by Herbert Marshall, Frank A. Southard Jr. and K. W. Taylor, published in 1936 for the Carnegie Endowment for International Peace, a detailed analysis is made of the investment of American capital in Canada. The authors conclude that Canadian tariff policy, particularly in the period after World War I, was the most important influence in the movement of branch plants to Canada. Not only was there deliberate tariff encouragement to American companies to establish plants to serve the Canadian market, but the advantages of operating within the British Empire preferential tariff system provided an added stimulus. Provincial and local authorities were active in pointing out these advantages to possible American entrants.

On the basis of motives for investing in Canada branch and affiliated companies have been grouped in two classes. On the one hand are mining, timber and other extractive enterprises, communication companies, stores, hotels, financial companies which entered Canada to secure raw materials or to complete or extend a service. On the other hand are the branch plants which are established in order to bring the products developed by the parent company more within the purchasing power of Canadian consumers by saving on transportation and import duty. This has been described as a "new export technique" which is resorted to when serious barriers are placed in the way of simple exporting.

While it is not necessary in this study to attempt to explore the economic and social effects produced by the large scale investment in branch plants and affiliated companies by interests outside Canada, it may not be out of place to quote the conclusions reached by the authors of "Canadian-American Industry":

> "It has immeasurably speeded up both the volume and diversity of Canadian manufacturing and greatly accelerated the development of Canada's natural resources. It is impossible to measure this acceleration statistically. Without the branch-plant movement and without the large volume of American direct investments, Canadian industrialization under the stimulus of the tariff and under the general technological and cultural trends of the past sixty years would doubtless have proceeded at a substantial rate. But it is equally certain that many of the 900-odd American-owned factories would never have been established by Canadian capital and enterprise, and most of them would not have been established as early as they were. Canadian capital and initiative have actively participated in Canada's development, but in proportion to the opportunities afforded by population and resources they have been less than could be profitably employed. Many American branch plants have no doubt stepped into industries where Canadian concerns would within a reasonable time have grown up to the requirements of the market, and thus have to some extent limited the growth and expansion of purely Canadian companies. The influx of American-owned plants may also have increased the number of factories with a consequent smaller average size."

The close relationship between foreign parent company and Canadian branch has resulted, in many cases, in Canadian industry securing early access to new technical processes and inventions developed in other countries. At the same time too great dependence on outside experimental work may result in too little research work being carried on in Canada. This possible drawback was pointed out by Dr. G. S. Whitby, then Director, Division of Chemistry, National Research Council, during the hearings of the Senate Committee on the Patent Act in 1935:

"I would draw the attention of the committee to this fact, that all the representatives of industry who have appeared to give evidence so far have without exception been representatives of firms with foreign affiliations. Not only that, but those firms rely exclusively or very largely for their research work upon research laboratories in foreign countries, the results of which work may make the subjects of Canadian patents."

It is stated in "Canadian-American Industry" that in 1932 almost a fourth of the manufacturing in Canada was done by American-controlled companies. The concentration varied greatly for the different fields of manufacturing and was largest in the following:

Automotive	82 per cent
Electrical apparatus	68 per cent
Rubber goods	64 per cent
Non-ferrous metals	50 per cent
Non-metallic minerals	44 per cent
Machinery	42 per cent
Chemicals	41 per cent
Pulp, paper and lumber	34 per cent

Attention is devoted to foreign-controlled companies only because of the possible relationship between such control and private international trade arrangements. If the parent company is an active or tacit party in any international arrangement then the operations of the subsidiary company or branch plant in Canada are likely to be directed so as to conform to the policy followed by the controlling company in relation to producers in other countries. While legally the Canadian corporation is a separate person, the actual management of a branch plant in Canada may be conducted as part of the general operations of the parent organization. The transfer of patents or other forms of property may necessitate formal agreements between parent company and subsidiary, but the determination of policy may often be effected without any formal arrangements as long as head office officials maintain supervisory control. It is quite understandable that the outside parent company would not wish to have its Canadian subsidiary competing with it in export markets. From the replies received to the letter sent to controlled Canadian companies it is possible to distinguish various degrees of control over the operations of branch and affiliated companies.

A. *Where the Canadian subsidiary is left free to determine its own policy.*—This is a relatively rare condition and even when the Canadian corporation indicated that it was not controlled as to markets it has generally confined its sales to Canada or to Empire countries. One company wrote:

"We are free to seek export business wherever it is possible for us to secure it. However, for various economic reasons we have not engaged in export business in the sale of our manufactured products."

Another replied:

"Of our own decisions we have limited any export to the British Empire but it is uncontrolled and we compete with our own associated American company."

B. *Where the Canadian subsidiary is definitely confined to the Canadian market.*—This may result from the management policy of the parent company without any formal agreement between parent and subsidiary or may be reinforced by the assignment of patent or other rights exercisable only within Canada. References already made to Canadian Industries Limited and Canadian Titanium Pigments Limited illustrate this situation.

C. *Where the Canadian subsidiary is allocated certain export territories.*—This is the situation where the Canadian subsidiary or affiliated company, in addition to marketing its products in Canada, is also permitted under intercompany direction to ship goods to certain export markets, generally within the Empire. One firm wrote:

> "We are allowed to ship to all countries in the British Empire, but we are prevented from exporting to South America and the Far East."

An affiliated company replied:

> "Our agreement with our affiliated companies limits our export activities to South Africa and Newfoundland. Our affiliated company in the U.S.A. has the sole rights to the U.S.A. and Mexico, and our affiliated companies in England, France and Holland have the sole rights to Europe. Our affiliated company in Australia has the sole rights to Australia and New Zealand and our affiliated companies in South America have the sole rights to South America."

D. *Where products of the Canadian subsidiary are exported by a separate export sales organization.*—In some cases, particularly with American firms, exports are made by a separate sales organization which handles shipments from both Canadian and American plants. The reply received from one company illustrates this situation:

> "For over thirty years we have had an arrangement with a separate export company which is affiliated with our parent company in the United States and was created to handle the export and sales. . . in all countries outside of the United States and Canada."

It is evident that all such arrangements have the same restrictive effect on Canadian exports as the division of markets under a cartel agreement. In such allocation of markets Canada is assigned to the Canadian branch plant. Such arrangements are made possible by the financial control which outside companies exercise over their Canadian subsidiaries; they may be effected without the knowledge of the Canadian management and without any agreement by the Canadian corporation. One Canadian subsidiary replied that following our letter of inquiry it had been informed by the parent company in the United States that the American company is a party to certain agreements with companies located outside the United States and Canada. Some of the agreements relate to products manufactured or sold by the Canadian subsidiary. The reply went on: "We understand that our company . . . is subject to the terms and conditions of some of these agreements, the details of which are not familiar to us".

There would appear need for the Government to be fully informed of the extent of the financial interest which persons or corporations outside Canada may hold in enterprises in this country, and also the way in which such interest is exercised. This may require more complete returns as to shareholders under the Companies Act and closer examination of the relationships between outside corporations and subsidiary or affiliated companies in Canada. Foreign investment makes substantial contributions to Canadian industrial development through the provision of physical equipment and, equally important, by making technical processes and industrial rights available for use in Canada. Full information can be obtained by Government as to the financial control exercised in Canada by outside corporations without interfering with the beneficial results of such international exchange.

III

THE RELATION OF PATENTS TO CARTELS AND COMBINES

The participants in cartels often make use of patent rights to divide the markets of the world among themselves by national territories and to establish within a national territory a comprehensive system of marketing control. This report is not concerned with the legitimate use of individual patent rights, there is no question about the necessity of protecting the property right that the patentee has in his invention, and no suggestion is made that would involve any restriction of rights conferred under the Patent Act. It is concerned with any forms of monopoly or combination, either domestic or international, that may make use of patents as a basis for restricting competition in a manner or to an extent not authorized by the Patent Act.

The essential purposes of the patent law of Canada are expressed in the following extract from section 65 of the Patent Act:

> "patents for new invention are granted not only to encourage invention, but to secure that new inventions shall so far as possible be worked on a commercial scale in Canada without undue delay."

The objects are thus twofold: to protect the property right that the patentee has in the invention, and to promote the use of the new invention for the public benefit. The Patent Act gives to a patentee the exclusive right to make, use and sell his invention in Canada. Certain limitations and standards of conduct are however imposed upon patentees. The exclusive right is limited to seventeen years. If the invention is not worked in Canada without undue delay, or if the reasonable requirements of the public as to supply or price are not met, the Commissioner of Patents may grant to any qualified applicant a compulsory licence to work the patent or in the event that a compulsory licence is considered by the Commissioner to be an inadequate remedy for such abuses he may revoke the patent, subject in either case to appeal to the courts. The exclusive right does not include or imply any authority to combine with other patentees for the purpose of restricting competition between different patented articles or in the use of patented processes, or to impose unduly restrictive conditions upon others whom the patentee has licensed to make, use or sell his patented articles or processes.

Patent rights may be used in a variety of ways in furtherance of cartel or combine activities. One way is through the exchange of patent rights or a system of cross licensing or of direct licensing. These legitimate means of extending the use of patent rights take on a restrictive character when they form part of an agreement to eliminate competition between the parties. A like effect results when a patentee, who under his patent owns the right to improvements which other manufacturers are anxious to use, or who makes a patented article which others are anxious to sell, demands as a condition that they agree to observe restrictions on production, such as a quota on the number of articles to be made or a limitation on the industrial purposes for which the process may be used, or restrictions on distribution such as control of resale prices. Both types of combination may be either on an international or on a national scale.

The international patent system consists of the sum of all the national patent systems. A patent gives to its holder in the country of issue, and in that country only, the exclusive right to make, use and sell the invention. Because he has in that country these exclusive rights the patentee is in a position to

dictate terms to others who wish to operate under those rights in that country. He can thereby prevent the importation of a similar kind of article, and this is of great importance to the members of a cartel seeking to allocate markets on an international scale. The patent-holder thus has in effect a monopoly which protects him from competition within the country and a sort of private tariff wall which protects him from competition from outside the country. The patentee must take out a patent in each country of the world in which he desires protection. From the viewpoint of a cartel this has the advantage that the patentee has thereafter at his disposal, in the form of a series of national patents, a number of "exclusive territories" which can be parcelled out to others and be made binding by invoking the patent law of each country concerned. In an industry where technological progress has been rapid it often happens that each of two different concerns will individually own improvements which taken separately are of no great commercial or social value but which if combined will result in an article which is superior to that which can be produced by them separately. Also an improvement owned by one concern under its patent may conflict to some extent with an improvement owned by another concern under its patent, so that neither can use its own improvement without risk of being sued by the other for patent infringement—a deadlock which may arise if a Patent Office inadvertently declares two persons to be owner in some part of the same idea.

When the leading members of an industry who are domiciled in different countries decide for their own purposes to bring together the ownership of these exclusive rights, the transaction will normally have both an international and a series of national aspects. There will be a "master agreement", known sometimes as a patents and processes agreement and sometimes as a patent exchange agreement, which will call for free access by each of the parties to the other's patented improvements, know-how and technical information, present and future. This master agreement, so far as the patents covered by it are concerned, will be carried into effect by dealing with the patents in every country in which they are held by the parties. The restrictive agreement is of the essence of the transaction, the dealings with the patents in the various countries being no more than implementations of the essential agreement to restrict competition. A patent exchange agreement for the control of international trade has restrictive effects similar to those of any other type of international cartel agreement.

The extensive system of market control which may be built up on the basis of the exchange of patents and process rights, and the bearing of such private international arrangements on the operation of Canadian industry, are illustrated by a series of understandings and agreements between Imperial Chemical Industries Limited of Great Britain and E. I. du Pont de Nemours & Company of the United States. Under the arrangements between ICI and du Pont the parties grant each other exclusive licences under present or future patents in the general field of chemicals. Exclusive territories are assigned to each party such as the United States and Central America to du Pont, and the British Empire, except Canada and Newfoundland, to ICI. In non-exclusive markets ICI and du Pont agree to avoid competition between themselves by making special arrangements including the formation of joint companies to which exclusive patents rights in such territories would be granted. These understandings led to the formation in Canada of Canadian Industries Limited, which is jointly owned by ICI and du Pont and receives from them the Canadian and Newfoundland rights to their inventions and processes. CIL also acts as the exclusive agent in Canada for products of ICI and du Pont which may be imported.

The elimination of competition between companies in different countries with respect to patented products commonly results in the companies withdrawing from competition in the production and sale of unpatented articles, particularly in territories in which exclusive licences have been granted to other parties to the agreement. An official of the du Pont company has summarized such an arrangement as follows:

> "It is obvious that when one company has given the other licences in that company's exclusive territory that it becomes more and more difficult for the granting company to carry on business in the territory of the grantee, as the granting company gradually loses its rights to use the various improvements which keep its product abreast of the times. It also follows that it would not be good business practice to maintain agents in these territories who would only be free to sell products not covered by patents or secret processes. There is no obligation to get out of any territory, although it is obviously necessary from a common sense viewpoint to gradually withdraw from the exclusive territories of the other party."

Patent exchange agreements often provide that neither party shall impart to a third party any information gained from the other without first securing the other party's consent. In 1919 International Western Electric Company of New York and Northern Electric Company of Montreal entered into an agreement providing for the exchange of technical, engineering and manufacturing information relating to all products manufactured by either company. This agreement provided that the information so furnished cannot be released to others. After agreements for exclusive exchange of information have been in operation for a time, technical knowledge or "know-how" derived by one company from its own research and experience becomes combined in an inextricable fashion with the knowledge obtained under an exchange of information agreement. If the spirit of the agreement is lived up to, neither company will provide any outside firm with information as to processes covered by the agreement without first obtaining the consent of the other party. In a number of instances shown in the reports of investigations in the United States, I. G. Farben of Germany delayed issuing licences under patents not covered by any private agreements with United States firms until it had been established that there would be no objection from firms with whom it had co-operative arrangements.

By a series of inter-related agreements third parties may become bound by the restrictive features of other agreements and the freedom of action within the industry is progressively narrowed. This tendency is illustrated in the following memorandum which was drawn up as a result of a meeting of ICI, du Pont and CIL representatives in 1938:

> "Annex 'A' Memorandum to be sent to Department Heads of ICI, du Pont and CIL.
>
> Where, in the interests of developing some particular line coming within the scope of your industry, it is found desirable to make arrangements with some other outside company, domestic or foreign, which involves the pooling of present knowledge and/or joint action on future development work, it must be carefully borne in mind that for products covered by the existing Tri-Party Agreements, Canadian Industries Ltd. has an obligation towards E. I. du Pont de Nemours & Co. and Imperial Chemical Industries Ltd. relative to patents and secret processes for territory outside of Canada, and du Pont and ICI have a similar obligation towards CIL for Canadian Territory.

Under these circumstances, this obligation should be made clear in advance to the outside company with which the joint arrangement is being effected so that in so far as possible the territories reserved for du Pont and/or ICI, on the one hand, and to CIL on the other hand, will be excluded from the operations of the new entity unless or until a mutually acceptable method of procedure for the reserved territory can be made with the party or parties affected."

Just as private international trade agreements for the assignment of patent rights may form the basis for the allocation of national markets, so the assignment of patent rights on a national basis may be used as a means to divide industrial fields within a country. In 1923, Canadian General Electric, Canadian Westinghouse, Canadian Marconi and Bell Telephone and Northern Electric (all Canadian corporations) and International Western Electric of New York entered into an agreement covering vacuum tubes, and all apparatus involving use of vacuum tubes, and all apparatus for electrical communication and signalling, under which the Canadian corporations got non-exclusive licences under Canadian and Newfoundland patents limited to particular fields of use. It was apparently conceded that Canadian General Electric and Westinghouse would have the power apparatus and meter fields; Northern and Bell would have the general field of communication by wire; Canadian Marconi would have the wireless telephone and telegraph field; Canadian Marconi and Bell would have the field of combined wire and wireless telephony; all five Canadian companies were entitled to enter the tube and radio apparatus business.

In the radio field, as has already been shown, patents relating to tubes have been concentrated in Thermionics Limited and those relating to radio sets in Radio Patents Limited. Thermionics Limited was incorporated in 1932 and under agreements made with shareholder companies in January, 1936, it received licences under patents held by Canadian Marconi Company, Canadian General Electric Company, Canadian Westinghouse Company, Northern Electric Company and Rogers-Majestic Corporation. Thermionics then licensed each shareholder company with full rights to operate under the patent rights assigned by all of them to Thermionics Limited. The licensees of Thermionics Limited are permitted to sell radio tubes only in accordance with schedules of prices, terms and conditions of sale established by Thermionics Limited. The result has been the fixing of common prices and terms of sale for radio tubes at the manufacturing level. Further restrictions were imposed under the licence granted to one shareholder, Rogers-Majestic Corporation, which was limited in volume of production to:

(*a*) replacement tubes not to exceed 20 per cent of number of radio tubes sold installed in radio sets during previous six years;

(*b*) number of tubes required for installation in radio receiving sets each year;

(*c*) number of old type Rogers tubes required for replacement.

Thermionics Limited had no direct contact with jobbers or dealers in tubes but each licensee adopted a standard form of jobber contract prepared by Thermionics Limited. These contracts required the jobbers to maintain the list prices and discounts fixed by each manufacturer.

Sometimes the fixing of resale prices is undertaken by a foreign company holding patent rights in Canada. One common type of electric conduit is manufactured in Canada under patents held by an American corporation. Canadian licensees are required to observe sales prices fixed by the licensor. A similar situation has arisen in connection with certain types of optical goods where patent rights have been assigned to a controlling corporation which has fixed resale prices at wholesale and retail levels throughout Canada.

A number of instances have been found in which Canadian concerns have been debarred from exporting to other countries because of the existence of opposing patent rights. The following statement by a Canadian company is typical:

> "We have confined our manufacturing and distribution of the various items of... equipment, produced under the patents and licences which we hold, to the Dominion of Canada because those patents and licences confer rights exercisable only within this country.... To the extent that any article we manufacture is patented our export of it to a foreign country would expose us to infringement proceedings at the instance of a patent-holder or licensee in that country."

The world-wide industry to which this company belonged has succeeded — by vesting the United Kingdom patents in a British concern, the Canadian patents in a Canadian concern, the United States patents in an American concern— in presenting to each a private tariff wall around its own country. British, Canadian and United States patent laws are thus used for the purpose of ensuring that trading in that industry is strictly confined to national compartments. In those situations the foreign patents operate to prevent Canadian export trade.

Canadian import trade can in like manner be effectively interfered with at the behest of the holder of a foreign patent. The importation into Canada of a patented article can be effectively stopped by the patent-holder of a country in which it is made refusing to grant a licence to make or to sell in that country for the purpose of export to Canada and this may be done to implement arrangements for a geographical division of world markets, each participant having a monopoly in his territory. The following extract from a letter from an English manufacturer to a Canadian importer illustrates this situation:

> ". . . whilst we have now taken out a licence for the manufacture of this style, we regret that the selling rights are reserved in the case of Canada, and we shall, therefore, be unable to supply you."

One of the outstanding wartime scientific developments in Canada was the invention by Dr. L. M. Pidgeon of a new process to produce magnesium. This process, developed at the National Research Council, made possible, in 1942, the first commercial production of magnesium in Canada since production by an earlier process was suspended after the first World War. In the intervening period magnesium production was made subject to a series of agreements between I. G. Farben, Alcoa and Dow Chemical which effectively controlled production on this continent. The demand for magnesium during World War II was so critical that every feasible means of production was developed at the utmost speed. Dominion Magnesium Limited was formed as a Crown company in February, 1941, to exploit the Pidgeon process in Canada. In May, 1945, the undertaking was sold to private interests who now hold exclusive patent rights to the Pidgeon process in Canada and the United States. Already the new company is being faced with the possibility of patent litigation. In a prospectus issued July 3, 1945, it is stated that "a letter has recently been received by the Company suggesting that the Pidgeon process infringes certain Canadian Letters Patent held by other parties".

Patent exchange agreements, like other forms of private contract, are matters of private negotiation between the parties concerned. The interchange of patent rights by different patentees is not itself objectionable. Obviously proper is an interchange, whether by way of each patentee giving to the others reciprocal permission to use his patent (cross licensing) or by way of each patentee transferring his patent to a holding company which thereafter licenses each transferor to use the patents of all the member patentees, (patent pooling)

for the purpose of preventing possible wasteful litigation between owners of overlapping patents, the cost of which litigation would ultimately be paid by the consumer, or for bringing together patents which by themselves are of little use but combined are commercially valuable, or for enabling each member patentee to have the benefit of the latest research developments made by all the others. When, however, the members of an industry use such arrangements for the purpose of restricting production or fixing prices the possibility of abuse clearly arises. The fact that the parties surrender their patents to a holding company and then take back licences which contain the restrictions they have already agreed upon does not alter the essential character of the restrictive agreement. Association in a patent pool or cross-licensing agreement in itself has elements of danger where this creates effective control over any large portion of an industry. In a relationship where participants are so closely associated, there is need for public safeguards against the exploitation of opportunities for cleverly disguised abuse. If a patent pool is so strongly established as to be able to coerce manufacturers outside the group, to secure patents on its own terms or to exercise monopoly control over a branch of industry, its activities need careful watching. The feature of the patent pool or cross-licensing agreement which makes trade restraints of this type so difficult to deal with is its double-headed aspect of legitimate constructive economies and of dangerous potentialities for disguised restraints of trade.

Canadian law makes available two main forms of remedy against monopolistic misuses of the exclusive property rights which are granted by the grant of a valid patent for an invention. Under the "working provisions" of the Patent Act, sections 65 to 71, if a patentee has abused his exclusive patent rights in specified ways the Commissioner of Patents may require him to grant to an applicant a licence to work the invention or may revoke the patent if such compulsory licensing is insufficient to prevent the abuse. Similar working provisions are contained in the patent law of the United Kingdom, and are not provided in the United States patent laws. As a second form of public safeguard against monopolistic misuses of patents, Canada, like the United States and unlike the United Kingdom, has provided measures of anti-trust law as represented by the Combines Investigation Act.

Both these forms of public control have their place in providing protection to the Canadian public against misuse of patents, and will have to be adapted and applied in vigorous fashion in keeping with a general policy to deal with undue restraints of trade. The working provisions of the Patent Act, when they can be invoked by applicants for patent licences, are particularly adapted to securing that new inventions shall so far as possible be worked on a commercial scale in Canada, as distinct from being worked only in a foreign country. It should be borne in mind that less than ten per cent of the patents issued in Canada are granted to Canadians. The Combines Investigation Act is more particularly adapted to the prevention, under criminal law sanctions, of such monopolistic misuses of patents as their use to assist trade combinations or monopolies in exacting excessively high prices for goods or in otherwise unduly restricting Canadian production, distribution or trade.

Under the Patent Act in any of the following four sets of circumstances a qualified applicant interested in manufacturing under a patent may be granted, on the order of the Commissioner of Patents, a licence to manufacture under the patent in Canada: (*a*) failure to work the invention in Canada; (*b*) importation to the detriment of its working in Canada; (*c*) failure to meet adequately and on reasonable terms the Canadian demand for the patented article; and (*d*) pursuing a licensing policy which, by refusal to licence on reasonable terms or by licensing on unreasonable terms, prejudices any industry or trade in

Canada or any concern engaged therein. General questions of the operation of the Patent Act, as distinct from the use of patents in the formation or operation of international cartels or domestic combines, have not been considered to be within the scope of the present study and no opinion is expressed as to the effectiveness of the existing provisions. The British Patents Act, from which the working provisions of the Canadian Act were taken, is at present being exhaustively reviewed by a Committee of the Board of Trade. That there is some question as to the effectiveness of the safeguards provided by the British Patent Act is indicated by the following introduction to a questionnaire issued by the Committee:

> "Complaints have been made in certain quarters that British patents are used to the detriment of the public interest, for forming cartels, for suppressing and retarding competitive developments in industry, etc."

An official inquiry seeking improvement of the United States Patent Act also now is in progress.

The Combines Investigation Act, the second of the two potential remedies mentioned, is designed to protect the public against evils which arise from the absence of competition in trade. In pursuance of this policy it provides for investigation of alleged offences and for punishment by the ordinary processes of the criminal law of (*a*) those who injure or endanger the public by means of *agreements* between persons to restrict competition in production or distribution and (*b*) those who, with or without agreements with others, similarly affect the public by abusing their *monopoly* positions. To be more specific, section 2 (1) of the Act strikes at the action of those who injure the public by means of agreements which limit facilities for production or distribution, limit production, fix common prices or resale prices, enhance prices or, quite generally, which lessen competition in or substantially control production or distribution or otherwise restrain or injure trade or commerce. Section 2 (4) strikes at the action of those who, having acquired any control over or interest in another's business or having substantially or completely controlled the class of business in which they are engaged, use their control to injure the public.

Neither of these subsections of the Combines Investigation Act, which comprise the definition of an unlawful combine, is designed or can be used to impair the rights which a patentee derives under the Patent Act. Section 2 (1) may be applied, however, where a patentee enters into agreement with other patent-holders or with other manufacturers or with his distributors to use means or to achieve results which are not part of his patent rights and which operate against the public interest. Section 2 (4) may be applied if a patentee occupying a dominating business position, with or without agreement with others, uses to the detriment of the public the exclusive patent rights which have been accorded to him by the state. A proviso to Section 2 (4) states that "this subsection shall not be construed or applied so as to limit or impair any right or interest derived under the Patent Act, 1935, or any other statute of Canada". The rights or interest which may be derived under the Patent Act obviously do not include the right to operate to the detriment of the public, since to operate to the detriment of the public is the essence of the offence created by the Combines Investigation Act. With or without the proviso quoted, the mere holding of a patent could not render the patentee liable to penalty under the Combines Investigation Act. A patentee as such could not come within the section defining a "merger, trust or monopoly" unless his patent were so basic as to give him control over another's business or control of the class or species of business in which the patentee was engaged. Even if he did come within this definition he would be liable under the Act only if the "merger, trust or monopoly" to which he was a party

had operated or was likely to operate "to the detriment or against the interest of the public". A tentative opinion was expressed in the debates in the House of Commons in 1935, when the above-quoted proviso was inserted, that it was designed to give effect to obligations of Canada under the International Convention for the Protection of Industrial Property, to which Canada was a signatory. Article 5 of the Convention[1], however, which restricts the measures which a signatory may take against abuses of patents issued by it, does not purport to limit the right of a signatory nation to apply to patentees the ordinary criminal laws of the land.

The patent pool is a typical form of agreement between individual holders of different patents to eliminate competition between them or to keep their inventions away from outsiders. If the members of a patent pool have agreed to eliminate competition between themselves, as by restricting production or fixing prices, and have proceeded to carry it out by such ways as inserting restrictive conditions to that effect in the reciprocal permissions, or cross-licenses, to use one another's inventions or by seeing that the holding company to which each has transferred his patents inserts similar conditions in the licenses it gives back to each member, the agreement is in no basic way different from any other agreement to eliminate competition, and is punishable as such when against the public interest.

This was pointed out in the debate on the Act in the House of Commons on April 5, 1937, and in the judgments of the Exchequer Court and the Supreme Court of Canada in the Thermionics case.[2] If the agreement itself offends against the Combines Act the fact that it is carried on, and perhaps rendered more easily carried on, by means of patent machinery is irrelevant. If the agreement between the members of the pool is one to restrict the use of the inventions they have put into the pool, as where they have agreed to "suppress" some of them or not to license outsiders, they have agreed to limit facilities for manufacturing, supplying or dealing, within the words of Section 2 (1), defining a combination. The Patent Act does indeed give to a patentee a "monopoly" in the sense that it gives him "the exclusive right, privilege and liberty of making, constructing, using and vending to others to be used the said invention", but it nowhere authorizes him to agree with other patentees to eliminate competition between them or to conspire to keep their inventions away from outsiders.

It is clear that Section 2 (1) of the Combines Act, in defining a combination includes agreements which a single holder of a patent or group of patents may make with his licensees. Many patent licences contain, either openly or in a disguised form such as a graduated royalty, restrictions to be observed by the licensee. This type of restrictive patent licence is a control device much favoured by cartels. A concern which owns the important patents in an industry may thereby be in a position to tell those who wish to use the inventions in their manufacture that they cannot do so unless they agree, in the case of those engaged in manufacturing, to observe restrictions on, say, the uses to which a

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(1) Article 5 of the International Convention for the Protection of Industrial Property, signed at The Hague, November 6, 1925, British ratification deposited May 1, 1928, provides as follows:—

"5. The importation by the patentee into the country where the patent has been granted of articles manufactured in any of the countries of the Union shall not entail revocation of the patent. Nevertheless each of the contracting countries shall have the right to take the necessary legislative measures to prevent the abuses which might result from the exercise of the exclusive rights conferred by the patent, for example, failure to work. These measures shall not provide for the revocation of the patent unless the grant of compulsory licences is insufficient to prevent such abuses. In no case can the patent be made liable to such measures before the expiration of at least three years from the date of grant of the patent and then only if the patentee is unable to justify himself by legitimate reasons."

(2) 1939 D.L.R. at 136, per Maclean, J., and 1943 D.L.R. at 458, per Duff, C.J.

process may be put, the number of articles which may be produced or the markets in which they may be sold. Or distributors may have restrictions imposed on them such as a requirement that they observe resale prices stipulated by the patentee. The latter is able, that is, to use his ownership in the invention to induce distributors and other manufacturers to enter into agreements in restraint of trade, and the combined effect of a number of such arrangements may be the organization of distribution or production in an industry in a manner seriously detrimental to the promotion of trade and to the interests of the consuming public. Where the principal actor and beneficiary of a detrimental scheme of this nature is the patent-holding concern, and the licensees did not enter into the agreement willingly, the latter fact might go in mitigation of punishment for the offence of the licensees, but would not relieve them from liability under the Act. On the other hand the parties would not be civilly liable to each other for any failure to fulfil the unlawful terms of the agreement.

The power which may be wielded by the owner of an important and desirable invention is very great, and patent licensing arrangements frequently can embody restrictions which are against the public interest. For this reason it might be found desirable to provide more specific statutory limitations, in conformity with the principles of Canadian law applying to undue restraints of trade, upon the power of patentees to impose restrictive conditions upon licensees, as in the British Patent Act in which certain types of restrictive conditions are declared to be unlawful and null and void as being in restraint of trade and contrary to public policy.

In considering present and possible remedies against cartel practices associated with patents which affect Canadian trade or the Canadian consumer, it is important to remember that Canada cannot apply any remedy provided by its patent law to any patent except a Canadian patent and cannot apply any remedy provided by its criminal law against undue restraints of trade to any concern except one which is doing business in Canada and is thereby within the reach of Canadian criminal process. Where private international agreements operate to prejudice Canadian import or export trade by making use of foreign patent rights to control Canadian trade, the remedies provided in Canadian law are not applicable. The agreement in pursuance of which exclusive patent rights having the effect of private prohibitory customs tariffs are handed to the concerns to whom the national territories are assigned is one to restrain world trade, and when made applicable to Canada by parties who do not reside in Canada it is beyond the reach of any Canadian law against combinations in restraint of trade. Similarly when the patents which are used to implement the agreement are not Canadian patents they are therefore beyond the reach of the Canadian patent law. The prevention of abuses arising out of the restrictive features of international patent agreement must be achieved through measures of intergovernmental collaboration in regard to international cartels generally, as such use of patent rights is merely one of the restrictive controls resulting from cartelization.

IV

THE NEED FOR AN EFFECTIVE POLICY

International Cartels

The description of private international business agreements which has been given in the preceding sections leads to the conclusion that the power which may be exercised by international cartels is such as to demand close scrutiny and effective control by governments. The kinds of governmental action which will prove most effective are more difficult to determine. In this section the nature of the problem is discussed in order to emphasize the need for finding methods of controlling international cartelization and the difficulties likely to be experienced in working out an effective basis for national and international action.

International cartels were classified in Chapter I under three heads:

(1) Those affecting commodities for which Canada is dependent wholly or in large part on importations,

(2) Those giving Canadian manufacturers exclusive enjoyment of the home market but which bar them from exporting to other markets,

(3) Those involving participation by Canadian exporters.

The most immediate effects of any particular cartel on the Canadian economy depend upon the class in which it falls. The Canadian consumer is directly concerned with those in all three classes which possess the power to limit unduly the supply or types of goods or to maintain unreasonably high prices. Some Canadian producers are most interested in those of the third type as giving them a share in the private advantages of limited competition and higher prices in foreign markets, and these private advantages accrue to many more Canadians than those directly associated with the production of the cartelized commodity. The short-term balance of advantage and disadvantage for a country which is subject to the operation of foreign cartels of the first type and whose nationals participate in other cartels of type number three is difficult to cast. It is still more difficult to cast the balance in cartels of type two for it is well nigh impossible to determine whether the Canadian industry would have been established or would have been permitted to survive except under the restrictive terms of the agreement.

Any such balancing of national advantage and disadvantage from the operation of cartels is, however, misleading. Canada has a more serious interest in the totality of cartelization than in the mere sum of the effects of particular cartels. For cartel agreements are simply one important part of a network of restrictive practices, private and governmental, which spread over the world in the period between the two World Wars. For example, high tariffs, import quotas, discriminatory currency practices, exchange controls, subsidization of exports, contributed to the division of world markets and prevented the efficient use of world resources. National and private restrictive practices which impede the use of new technology, divide up markets and limit output are obstacles in the way of expansion in the flow of goods and services which, in the words of the Lend Lease Agreement, "are the material foundations of liberty and welfare of all peoples". Any narrow gains through such restrictive practices are lost in the curtailment of employment and production when such devices are extensively adopted. The interest of Canada in the revival of world trade and

in the adoption of policies of expansion transcends any such balancing of possible advantages and disadvantages. The importance of an effective international policy to remove the serious restrictive elements in cartel operations as part of a general attack on all hampering trade restrictions is of much greater significance than the direct effect of the elimination of each separate undesirable cartel agreement.

To the extent that cartels attempt to resist change and maintain the status quo, to prefer security to progress, they tend to impoverish the world. In the post-war world this will be a particularly undesirable attitude. In the first place, the great technological advances of the war period must be applied to peace-time industries. New competitive products and new sources of supply of old products will emerge. Such new developments must not be throttled at birth by defenders of the status quo. In the second place, the development of the backward countries must take place if the promise of "freedom from want" is intended to apply to more than the small fraction of the world's population in the industrialized nations for which that freedom is now reasonably possible. The industrialization of the undeveloped countries will provide immediately new opportunities for investment and the sale of capital goods, and should assist initially in maintaining a high level of employment in the older industrialized countries. But in time it will subject many old sources of supply to new competitive conditions. Adjustment to the impact of such new developments will require great industrial flexibility in the presently industrialized world, not a policy of resistance to change. Finally, there is the danger that governmental policies intended to promote expansion and full employment may be rendered nugatory, or much less effective than they might have been, if cartels take advantage of increasing demand to raise prices rather than to increase production. Further, since effective employment policies involve a high level of investment attempts to protect old investments by unduly limiting the introduction of new techniques and new products must make more difficult the attainment of a high level of employment.

While urging the need for the formulation of public policy with reference to international cartels because of the potential harm they may work, it is necessary to urge also that the policy should be developed with a thorough understanding of the conditions leading to the formation of such cartels and the existence of divergent views as to their function and effects, which divergencies run to some extent on national lines.

The spread of cartels in the last twenty-five years was in part the product of demoralized market situations resulting from maladjustments created by the last war and the confusion which succeeded it, from the impact of technological change in a world which had lost the expansive force of rapid population growth and geographical expansion, from the long years of under-employment which the people of so many countries suffered. To understand the progress of cartelization one must understand the difficulty and painfulness of wholly free competitive adjustment under modern conditions in a depressed world. Many serious difficulties of adjustment are experienced where highly specialized natural resources are involved. Canadian experience with the world market for wheat must lead to some understanding of the desires and problems of producers of tea, coffee and rubber in their efforts to control the market. Heavy investment in modern industry with consequent high proportions of overhead cost has made competitive adjustment to declining demand extremely difficult, especially when general business activity is at a low level. The multi-product firm presents other difficulties, as do the cases where the prime product of one industry is the by-product of another. The competitive process is much harsher and less fluid than many theorists have realized or admitted. Theoretically as the price falls

under competitive pressure the less efficient are eliminated and the demand for the product increases. In fact the less efficient continue to produce as long as their direct costs are covered, and in conditions of widening depression the demand shrinks in spite of the fall in price. Under such conditions it is inevitable that each group will try to find some shelter. Some will seek it through governmental action such as tariffs, bilateral trading agreements, exchange depreciation. Others will seek it through private agreement with their competitors and in many countries they have been encouraged by their governments to enter such agreements.

It seems clear that cartelization promised no real solution to the economic distress of the period between the World Wars and likely that it acted in the aggregate to intensify the general distress, though some have argued that it gave the necessary minimum feeling of security that permitted continued investment. But in a depressed world, cartel policies did enable some countries and some industries to shift the burden of depression. If cartelization promised them no solution, the mere renunciation of cartels promised them none either. Many positive expansionist measures were necessary, not only the negative policy of forbidding private cartel agreement.

The conclusion seems to be that, in times of depression, restrictive agreements, private or governmental, will develop as one group after another seeks to achieve some security; that the abandonment of such agreements would not be in itself enough to promote expansion; but that expansionist policies would be rendered less effective by continued restrictive private agreements. Competition remains a great force for economic development in the world and the essential reason for establishing government policy with respect to restrictive cartel agreements is to permit competition to operate more effectively. Even the operations of cartels illustrate the potentiality of some forms of the competitive force, in the necessity at times for major readjustments of the terms of cartel agreements. Where the control is not firmly linked to some corporate relationship or other binding basis of ownership as in patent or trade-mark rights, in an expanding market few will agree willingly to adhere to restrictions on their access to it; several cartels, e.g. copper and aluminum, abandoned their control of production as the armament demand of the late thirties provided expanding markets. The most effective way of eliminating restrictive arrangements of this type is to create conditions of expanding trade which will render them unnecessary and by a policy of removing trade barriers enable competition to burst through the restrictions. As part of an international program of trade expansion, a policy of eliminating restrictive cartel arrangements has considerable importance and prospect of success. But if depression and insecurity were to characterize the post-war world there would be little chance of intergovernmental agreement to eliminate undue restrictions. Canada along with other members of the United Nations is committed to the policy of the expansion and freeing of world trade. Success in that policy will require continuous search for the most effective means of removing undesirable restrictive arrangements affecting both our domestic and foreign trade.

Domestic Combinations and Monopolies

The relationships between international and domestic trade combinations are illustrated in a number of the examples of private agreements given in the foregoing sections. National combinations or monopolies and international cartels are related aspects of the tendency toward concentration of commercial control which has been a characteristic of modern industry and which is in some cases a result of technological processes making for large scale operation. It is

necessary to consider not only the relationship between national and international trade combinations but also the position of domestic trade combinations and monopolies not involved in international agreements.

The coming of peace has given immediate urgency to the development and encouragement of those factors in our economy which will speed reconversion and stimulate healthy reconstruction. Competition in the field of private enterprise remains one of the most important elements to secure the fullest utilization of economic resources and the opening of opportunities for new employment. The re-establishment of industry and trade on a peace-time basis offers an opportunity to make a fresh start in guiding economic activities so that they will serve the public welfare, through the competitive enterprise of businessmen and through government measures for safe-guarding the public interest. At the same time it must be recognized that there will be opposing tendencies. During the war Canadian industry and trade operated under what may be termed a controlled economy rather than a competitive system. These controls were developed with the co-operation and assistance of the industries to which they were applied. The power of trade associations has been strenghtened in some cases through more intensive organization of industry and through added prestige gained from useful co-operation with public wartime control agencies. As the wartime government controls over production and distribution are withdrawn there must be no establishment of extensive privately operated schemes to prevent competition from resuming its essential role in industry and trade, where if not prevented it would operate as the automatic and most useful basic social control of price and production policies. Freedom of entry for new firms into old and new industries is an essential requirement for the maintenance of such competition.

It is unnecessary to discuss in detail the various types of restrictive practices which may be engaged in by domestic trade combinations. In many respects they are the same as those followed by international cartels. Combines which have been condemned by Canadian courts in past years have involved fixing of prices, identical bids, division of markets, allocation of customers, sales or production quotas, resale price maintenance and other forms of control of production or prices. Examples may also be found of blacklisting of suppliers or customers, the buying up of competitors, selling below cost locally and temporarily to destroy legitimate competitors, and other types of unfair competition. The Combines Investigation Act does not make any provision for the investigation of unfair competitive practices unless they relate to the operations of an alleged combine. The restraints of trade which may result from unfair competitive practices are of importance because they conflict with the maintenance of a healthy and expanding competitive economy. It would be desirable to extend the powers of investigation under the Act to include all legally-defined classes of unfair trade practice offences which relate generally to price, production and distribution policies or to competition or the undue prevention of competition.

Restrictions arising from the use of patents are dealt with in Chapter III in which the application of the Combines Investigation Act to detrimental uses of patents by combinations and monopolies is discussed.

Of a different character are the restraints on trade which arise from the dominance of an industry by the merging or amalgamation of firms or from the growth of individual companies to the stage where they become, in their particular fields, single-firm monopolies. Industrial concentration resulting from mergers or amalgamations takes the form of an integrated corporate structure which differs substantially in legal concept from a trade combination of

independent firms. There are few, if any, precedents in Canadian criminal law which could be readily invoked to require a corporation to dissociate itself from monopoly controls which exist in or by reason of the fact of ownership by the corporation. The Combines Investigation Act makes it an offence for a person to be party to the formation or operation of a merger or monopoly to the detriment of the public, but this does not adequately deal with the existence of the merger or monopoly as such. In other words, once a detrimental merger or monopoly has been established its continued life may not be affected under the Act except by penalty. Such condemnation by the courts will not necessarily result in the restoration of competition, and an absence of competitive yardsticks would make difficult a measurement of the detriment suffered by the public from the restrictive operations of dominant concerns. Even in those cases where smaller firms continue to exist in an industry dominated by one or a few large producers, there is often developed what is known as a "follow the leader" policy, under which the leading company will determine its price and distribution policies which are then adopted by other producers and distributors, voluntarily or at any rate without entering into any agreement. The present legislation has serious limitations as a remedy for detrimental conditions of these merger, monopoly and "follow the leader" types, and remedies along the lines indicated in the final paragraph of this chapter, in addition to the existing provisions, will be required.

Serious as were all such restrictive practices under the conditions prevailing prior to the war, they will constitute even more dangerous impediments to business development in the period of reconstruction which Canada has now entered. Private agreements to restrict competition may serve to impede adjustments from war to peacetime production and may prejudicially affect governmental efforts to secure a high level of employment. It is essential to the future of Canada that full advantage should be taken by private enterprise of technological advances which were launched under the stress of war, so as to provide new opportunities for employment and a higher standard of living. There must be freedom in a competitive economy for new independent businesses to find root and grow whenever they can meet the conditions of the market.

The Combines Investigation Act is designed to suppress restraints on trade or monopolistic practices which have operated or are likely to operate to the detriment of the public. In the past the Act has been invoked principally on complaint regarding specific trade combinations. Provision should be made whereby the facilities of the Act should be more readily responsive to the needs of the community, more speedily set in operation. If the administrative agency is adequately empowered to investigate upon its own initiative, it should more often be possible to forestall undesirable collusive action at stages when preventive rather than punitive action can be effective. Public complaints, and particularly formal complaints of several persons, such as the Act provides for, have been found to be an uncertain and inadequate source of information on which to base administrative action. Individuals who suspect unlawful combinations are usually hesitant about making formal protests and, in addition, are unlikely to discover the results of unlawful activity until long after the combination has been set into operation. In the period immediately ahead there must be emphasis on preventive measures as well as prompt action to check the continuation of existing abuses of monopoly power, whether these abuses are established by means of agreement among separate concerns or by single-firm monopolies or mergers. This will require constant study and analysis of Canadian industry and trade. It is evident from the inquiries made in connection with the present study that there must be an effective organization to maintain continuous investigation, research and analysis of business practices as well as to secure the prosecution of flagrant cases of restraint of trade. The responsibility which is now placed on the Combines Investigation Commission to make findings in the case of specific alleged combines should be extended to

embrace the duty of securing at all times as full information as possible with respect to domestic and international trade combinations of a monopolistic nature and their effects on producers and consumers in Canada. In order to do these things it will be necessary to recruit and train an adequate staff and to provide suitable financial appropriations. There is also need to strengthen the Combines Investigation Act in certain matters of procedure including the avoidance of unnecessary impediments or delays in the conduct of proceedings under the Act.

In the administration of the Combines Investigation Act the primary effort to protect the public interest is directed to securing and maintaining competitive conditions of trade wherever possible and desirable. This effort represents, however, only one aspect of public policy and in certain circumstances it cannot be expected to succeed unless accompanied by effective action in other ways to remove private restrictions on production and distribution. Other means of public control should be developed which could be invoked in those special cases where the Combines Investigation Act would not prove the appropriate remedy. Prosecution is not the only remedy for abuses of monopoly, as past and present legislation indicates. Parliament possesses powers in such matters as tariffs, patents, trade-marks, taxation, public regulation and public ownership, which may be invoked to safeguard the public interest. Too often in the past each field of legislation or control has been regarded as separate from the others. The experience of the war has shown that in many instances desired policy can be put into effect only by related and coordinated activity in a number of major fields of government administration. This lesson should not be lost sight of when direct controls are dropped.

Industrial development in Canada has been greatly accelerated by the growth of war industries. Much of this development has been made possible by government investment in plants and material through Crown companies and otherwise. There can be no doubt that decisions made with respect to the disposal or future operation of government-owned plants and other assets will have significant effects on the future organization of Canadian industry from the viewpoint of concentration of production or the opportunities for competitive enterprise. It is essential that these long-run aspects of public interest should be kept in view in the sale of government properties as well as the immediate objective of securing adequate monetary return. The experience which has been acquired in the operation of Crown companies may prove of lasting advantage if circumstances require the maintenance of "yard-stick" plants in the future to cope with attempts at restrictive control over essential Canadian supplies by international cartels or the absence of domestic competitive enterprise.

Consideration should be given to the use of taxation as a means of providing more effective control over the operations of monopolies. If special taxation within federal powers could be devised which would serve as an incentive to the full use of available productive capacity and render it less profitable for corporations to leave capacity unused in order to maintain prices, such taxation would tend to check undue restriction of output by monopolistic groups. A number of suggestions for fiscal control of this type have been advanced by students of taxation in recent years. Many studies have shown how tariffs have been used by international cartels as a basis on which to establish private industrial control, and governments will wish to be equally vigilant in modifying tariff protection where it is being used to deprive the public of desirable trade advantages. Other powers should similarly be invoked to protect the public where it appears that they could be effective in preventing abuse of monopoly positions. That the national powers of any state have severe limitation in dealing with the consequences of cartels organized outside the nation is not to be gainsaid and these limitations serve to emphasize the need for collaboration among nations.

V

CURRENT PROPOSALS FOR THE CONTROL OF CARTELS

The development of networks of international agreements among private firms so as to create systems of controls with powers rivalling that of government itself and, because of their international character, often outside the limits of any one national authority, is generally admitted by business as well as other elements of the public to have created possibilities of serious public detriment. Opinions differ, however, on the question whether the abuse of cartel power can be prevented without depriving the participants of advantages they seek under such agreements. In the submissions received during the present inquiry all shades of opinion have been expressed by those replying on behalf of firms and organizations. Some businessmen, particularly those whose companies or parent organizations have participated whether directly or indirectly in earlier cartel arrangements, urged that such agreements should not be condemned but that means should be found to safeguard the public interest. A variant of this opinion was expressed by those who disapproved of the interferences to free enterprise resulting from restrictive agreements, but who believed that Canadian firms could carry on business in countries in which cartels were government-sponsored only if they conformed to the controls exercised in the interests of the national groups.

In other replies the complete elimination of cartels was advocated, on the grounds that they resulted in restricted output and higher prices and would thus tend to defeat efforts to expand employment and production through the creation of wider demand on the basis of lower prices. It was urged that the Canadian Government do all in its power to eliminate such restrictive agreements and co-operate with other countries working to the same end.

Canadian labour organizations have expressed themselves in opposition to the restrictive practices of cartels. The Trades and Labour Congress of Canada at the 1944 convention adopted a resolution "calling for the dissolution of all monopolies or cartels holding controls over any or all materials or processes that control the means of life or employment opportunities". The Canadian Congress of Labour submitted a carefully documented memorandum in this inquiry analysing the effects of cartel arrangements and other monopolistic conditions. It was stated that monopoly control permitted the maintenance of prices to the disadvantage of consumers and the securing of relatively high profits by dominant corporations. National and international monopolies were held to restrict employment by limiting imports and exports and preventing the fullest use of new inventions.

Both opponents and proponents of cartels agreed that international action is the only effective way to deal with the abuses arising out of private agreements among firms located in a number of different countries. The majority thought that this would necessarily involve some form of national registration and those who felt there were advantages in cartels which should be retained expressed the opinion that effective national supervision could be obtained in this way. A striking divergence of view was shown in this latter group. On the one hand were those businessmen who appeared to believe that business can no longer rely successfully on private initiative in export markets but must seek the maintenance of trade through private agreements "made with the full blessing and backing of the Government of Canada and under the sponsorship and auspices

of Government representatives here and abroad". On the other hand were those who urged just as strongly that the negotiation of private agreements would be a matter for the private interests concerned and that governments should not impose any controls or restrictions on their producers in such negotiations. In the view of the latter group the exercise of government authority should be confined to the scrutiny of the completed agreements and of their operation.

Public concern over the need of preventing abuses of cartelization has been shown in practically all industrial countries and has led to various proposals for collaboration among nations to protect the public interest of all. The lead in this direction has been taken by the United States Government, which has been actively pressing for international discussions among the United Nations on cartel policy along with other aspects of international trade. In a letter to Secretary of State Cordell Hull on September 6, 1944, the late President Roosevelt wrote:

> "Cartel practices which restrict the free flow of goods in foreign commerce will have to be curbed. With international trade involved, this end can be achieved only through collaborative action by the United Nations."

In his reply Secretary Hull said:

> "For more than a year the department, together with other interested agencies, has been giving careful attention to the issues which you mention, as well as other related subjects. An interdepartmental committee was established at my suggestion, and has been giving constant and current consideration to cartel matters and the methods by which the objectives set forth in your letter may best be achieved and most appropriately co-ordinated with other facets of our foreign economic policy. . . . In the near future, and consistent with the pressing demands of the war upon your time, I want to present to you in more detail plans for discussions with other United Nations in respect to the whole subject of commercial policy."

The untimely death of President Roosevelt did not affect the policy of the United States Government in this regard and proposals for collaborative action among the United Nations have been carried further under the administration of President Truman. A clear indication of the intentions of the United States Government was given in the following statement by Assistant Secretary of State William L. Clayton on May 17, 1945, before a Special Committee of the United States Senate:

> "We believe that the control of international trade by private cartels is a dangerous thing and that it is inconsistent with the economic philosophy which best serves the cause of peace and human well-being. It is for this reason that we plan to propose to the nations of the world an international agreement to banish the restrictive practices of international cartels."

Cartel arrangements are merely one aspect of the development of restrictive practices with respect to international trade. A workable plan to achieve freer international trade must embody a policy to deal with cartels as one part of a general program. That this view is clearly supported by the United States is shown by the following extract from Hon. Mr. Clayton's statement:

> "International action along these lines is felt to be imperative if private restrictions on international trade are not to counteract the expansive effects of the Bretton Woods Agreements and the reciprocal trade agreements mechanism. It would seem very shortsighted, indeed, to work for the expansion of world trade by reducing exchange restrictions, stabiliz-

ing exchange rates, creating a fund of credit for the financing of reconstruction and development projects, and reducing tariffs and other government trade barriers, while at the same time permitting private restrictive agreements to handicap international trade."[1]

In this study we emphasize the need of developing an international program of economic expansion which will assist in removing those conditions which foster restrictive arrangements. Even if such a program is successfully worked out it will be necessary, in order to ensure its full development, to provide machinery to deal with cartels aiming to exploit monopolistic situations through the imposition of private restrictions on international trade.

Details of the American proposals to curb cartels have not been made public but from the views publicly expressed by officials of the United States Government it may be expected that the United States will continue to urge international agreement along some or all of the following lines:

(1) International convention to prohibit certain cartel practices which restrain international trade, restrict access to international markets, or foster monopolistic control in international trade.

(2) Registration, with suitable governmental agency in each country, of private agreements affecting international trade.

(3) Establishment of an International Office for Business Practices under the United Nations Economic and Social Council to study and report on cartel arrangements and on the application of the international convention; to make recommendations to participating governments; to serve as central depository of information and reports.

(4) International collaboration in regard to patent, trade-mark and company law with a view to reducing the dangers of cartelization.

(5) Agreement among participating countries that restrictive action with respect to any commodity will be taken only on the basis of intergovernment agreement and will be applied only in cases of serious instability in an industry.

Although the United States has not announced officially any specific cartel practices on which intergovernmental agreement would be sought, it is expected that some at least of the following international cartel practices would be suggested by that country for prohibitory action:

(*a*) Agreements fixing prices;

(*b*) Agreements to allocate territorial markets;

(*c*) Agreements for the restriction of production;

(*d*) Agreements for the restriction of exports;

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[1] The proposals were further outlined by Hon. William L. Clayton in his statement: "Our preference runs very strongly in the other direction—that of seeking the concurrence of other countries in an agreement prohibiting the participation of commercial enterprises in contracts and combinations which restrain international trade, restrict access to international markets, or foster monopolistic control in international trade.

....It is not proposed to establish an international agency to enforce such an agreement on cartels. Rather, each government participating in the program would undertake to enforce the provisions of the agreement within its own sphere of jurisdiction. As a part of this responsibility each government might agree to provide for the mandatory filing with a suitable governmental agency of appropriate information relating to contracts and relationships affecting international trade.

Finally, the suggested program would recommend the establishment of an International Office for Business Practices, tied into the United Nations organization through the Economic and Social Council, to facilitate intergovernmental co-operation in the cartel field.

Such an organization could assist in the prevention of undesirable cartel practices by serving as a central depository of information and reports from participating governments and other sources; by initiating the study of problems relating to the activities of private international business organizations and the application of the agreement on restrictive trade practices, with a view to making recommendations to participating governments; and by furnishing information or undertaking such investigations as may be feasible to aid participating governments in matters falling within the scope of the proposed convention."

(*e*) Agreements for the restriction of productive capacity;
(*f*) Agreements to restrict the exploitation of inventions;
(*g*) Agreements not to supply or deal with non-cartel members;
(*h*) Agreements providing for differential prices;
(*i*) Agreements not registered in accordance with the plan for international registration.

If the proposal for the registration of international cartel agreements were adopted, nations agreeing to the prohibitions would scrutinize agreements entered into by their nationals and reject any which contained a prohibited trade practice. If any agreements were not registered the cartel members would be subject to legal action if located in any country requiring registration. In any event the nature of the agreements which were registered would be known to the government of each participating country. In any plan of registration it would have to be made abundantly clear that the formal filing of the agreement with a public authority did not carry with it any government approval of the terms of the agreement or provide any immunity if the agreement were found subsequenty to be against the public interest. A very serious difficulty in the registration of cartel agreements is to make the requirement sufficiently broad to include all restrictive arrangements falling within this class without overloading the registration authority with purely commercial contracts which have no relation to cartel agreements. On the other hand to define too narrowly the requirements for registration might result in the exclusion of cartels employing patent licences or other property transfers as a basis for their agreements.

The principle of prohibition of specific trade practices does not now exist in the anti-trust legislation of either the United States or Canada. Under Canadian law it must be shown that the practices complained of would result in an undue lessening of competition or otherwise operate to the detriment of the public. While the Sherman Law in the United States prohibits any agreement which restrains trade, the courts have so interpreted the statute that only unreasonable restraints are condemned. In both Canada and the United States the courts have generally held that private agreements which lead to industry-wide control over prices or production are against the public interest and consequently unreasonable. As cartel arrangements are generally made to embrace an entire industry, there may seem little distinction between the prohibition of all agreements to fix prices and the prohibition of agreements which fix prices so as to restrain trade unduly. The essential difference is that in the latter case the court determines whether there has been an agreement to restrain trade unduly, while under a law specially prohibiting the practice the court does not apply the test of undueness, but condemns any agreement to fix prices regardless of its scope or possible effect. Although superficially it might seem inappropriate to have one basis of law existing for domestic trade arrangements and another for international trade, some of the practices engaged in by cartels may be so clearly beyond any legitimate use as to justify agreement to outlaw them. Though sufficient information is not now available on which to base a final conclusion, it is suggested that private agreements to allocate world markets so definitely impinge on national trade policy and so usurp the authority of government that this practice might be prohibited by intergovernmental agreement as being in conflict with a trade-freeing program.

Opinion in the United Kingdom as in other countries is divided on the subject of the control of cartels. In the White Paper on Employment Policy issued by the Churchill Government, reference was made to the growth of restrictive industrial agreements and to the need of checking practices which might work public detriment. The London "Economist" has been urging for some time definitive legislative action to prohibit agreements to restrict produc-

tion or fix prices except under prior government approval. The Labour Party, which has long expressed its concern over the growth of industrial combinations and monopolies, has not yet indicated the form of such legislation as it may propose for dealing with anti-social practices of these forms of industrial organization.

Canadian policy has properly stressed publicity as one of the means of control of the domestic monopoly problem and might well stress the importance of publicity in dealing with the international problem. In dealing with domestic combinations under the Combines Investigation Act the procedure is to make public a summary of the evidence and the findings at the conclusion of the inquiry. Similarly, complaints of abuses by international trade combinations might be referred to an international agency which, after securing all the relevant evidence from the national investigation bodies and making any necessary inquiries on its own part, would make public its findings as to the causes of the complaint and the effect of the restrictive practices found to exist. Publicity of such findings would have a very salutary effect not only in each particular case but on the policies of private organizations generally.

While it would be necessary to ensure that the means taken through international action to prevent undue restrictive practices under private trade agreements were not applied in such abrupt or inflexible manner as to prejudice any legitimate national interest or to create serious industrial disequilibrium in any country, Canada should be able to subscribe to an international convention aimed at preventing the abuses of cartel power or other forms of monopoly control in international trade. As has been pointed out in the United States, it will be difficult to achieve adequate uniformity of interpretation or of policy if it is left to each country to determine what course of cartel conduct is undue or unreasonable. The restrictive practices of an export cartel might be regarded by producing countries, by Canada if we happened to be an exporter, as reasonable to protect producers, whereas they might be regarded by importing countries as wholly unreasonable. There is thus need for some recognized international agency to deal with such conflicts of interests between producing and consuming countries. There will also be need for other agencies to promote alternative lines of production or promote increased consumption when fundamental disequilibrium develops. It must be recognized that the protection which producing countries, or private interests in them, have sought through cartel agreements would not be discarded generally without evidence that a sufficient degree of industrial stability would be maintained through other means. Commodity arrangements or other forms of intergovernmental action may be applied in cases of serious maladjustment in the production or supply of raw materials or industrial products, while intergovernmental efforts to maintain a high level of national income would render private restrictive agreements less defensible. In other words, international action with respect to cartels must be timed and developed as part of a general trade-freeing program which will need to be underwritten in terms of trade expansion by the leading industrial nations. The objective in cartel policy should be to secure initially an agreed basis of international co-operation in dealing with private restrictive trade arrangements. The need of making allowance for national interests in financial matters has already been recognized in the Bretton Woods proposals, which would permit members to "avail themselves of transitional arrangements" when necessary. Somewhat the same course may have to be followed in reaching agreement among nations on cartel policy but, at the same time, each country should be committed to establish that degree of control over private trade agreements by its nationals which will support the principles accepted as the basis of international collaboration.

VI

CONCLUSIONS AND RECOMMENDATIONS

The present inquiry, in accordance with the terms of reference, has been directed to the assembling of information concerning the character and activities of international trade combinations and their relationships with domestic trade combinations, and to consideration of measures for their control. Its primary objective has been to secure basic information which could be employed in the formulation of future Canadian policy regarding international cartels and in negotiations with representatives of other nations concerning intergovernmental measures for the control of cartels.

The material which has been drawn upon for the completion of this report has been limited in extent. A much more complete picture of the operations of international cartels in relation to the Canadian economy could be obtained through more extensive inquiry. In spite of the limitations of the present study it has been sufficient to establish beyond question that there is need of a clearly defined and integrated course of government action in regard to international cartels, as an extension and essential part of the well-recognized public policy in Canada to guard against detrimental effects arising out of the operations of industrial combinations and monopolies.

International cartels, like domestic combinations or monopolies, are found characteristically to be outgrowths of the tendency toward concentration of industrial control which has accompanied the development of modern industry. The efforts of businessmen in every country to combine in their own interests have been strengthened, in many important industries, by the introduction of technological processes making for large-scale operation and by the growth of intense nationalism and the desire for national self-sufficiency in key materials against the danger of war. These national developments fostered the growth of private international agreements of a restrictive character which have been largely outside the purview of individual state authority. In Canada results have appeared sometimes in the form of restriction of imports, sometimes in the limitation of Canadian exports, and not uncommonly in the subjection of the control of certain Canadian industries to decisions made outside Canada. In seeking to eliminate competition cartels have often caused the restriction of output with the consequent maintenance of unused industrial capacity and uneconomic utilization of world resources.

From the viewpoint of public policy it is necessary to distinguish between domestic and international combinations because of the limitations of national sovereignty. Business firms, in the absence of international law on the subject, have been able to develop and administer their own private systems of international law and regulations. This development has aided in carrying the results of industrial integration and combination far beyond the boundaries of individual states and makes it difficult for any one country, particularly one largely dependent upon trade with others, to devise effective measures to deal with them. Difficult or not, it is essential that effective measures be taken in Canada to the full extent of national jurisdiction and by collaboration with other countries to prevent the abuse of monopoly power, whether such abuse is effected by national or international combinations of business enterprises or by individual dominant concerns. The real problem is to find methods of retaining the technical

advantages of large-scale undertakings in industries where these demonstrate their superiority while eliminating the restrictive practices by means of which full advantages might be denied to the public.

The main conclusions and recommendations of the inquiry are summarized in the following paragraphs.

1. The records of official inquiries which have been examined and the information obtained from other sources show that in the pre-war period there was a definite growth of a network of private international agreements of a restrictive character. In part, such arrangements have been attempts to cope with the situations created by demoralized commodity markets, but they also appear to represent attempts by heavily capitalized industries to protect themselves against the risks to investment created by rapid technological changes. Nationalism has played its part in the process.

2. Chapters I to III describe some of the cartel arrangements which affect Canadian imports, exports and internal trade in a number of commodities. Those examples illustrate the power of cartels to eliminate competition and to control production and distribution in wide areas of trade. The allocation of markets through restrictive arrangements made by private interested parties impinges on government authority over foreign trade and may nullify national trade policies developed to serve wider public interests. Government policies to encourage either imports or exports may prove ineffective if private barriers to such trade are erected by cartels. The reservation of the domestic market to particular producers may be as effective as a prohibitory tariff in barring imports. The allocation of import or export quotas by cartel agreement subjects foreign trade to quantitative limitation although such control may run counter to public policy. Ways must be found to prevent private business organized as cartels from supplanting government in the establishment of such commercial policies.

3. Cartel arrangements which impede industrial innovations and slow down the effective development of new opportunities for investment tend to diminish the supply of goods available for human use. Attempts by cartels to protect old investments by limiting the introduction of useful new techniques and new production would have a prejudicial effect on government policies to secure high employment.

4. The post-war period will require flexibility in industrial organization and operations, rather than restrictive arrangements designed to maintain the status quo. Industrial progress will be assisted by government policies directed to the elimination of restrictions on trade and by positive measures to promote expansion of trade and thus prevent the development of demoralized markets.

5. To an increasing extent international trade combinations have made use of agreements providing for the exchange of patents and technical information on a restrictive basis to control technological developments and their use in industry. There is need for close and continuous scrutiny of restrictive agreements based on patents and the Combines Investigation Commission should devote particular attention to this field. Certain abuses of exclusive patent rights by individual patentees can be dealt with through the Patent Act, but in most circumstances specified in the Patent Act such relief is obtainable only upon an application to the Commissioner of Patents by an interested person to whom a compulsory licence may be granted for use in his business. These provisions establish an important principle of public safeguard, but it has appeared obvious that the protection of the public against monopolistic exploitation by patentees could not be left solely to the initiative and self-interest of individual applicants

for patent licences. Where patentees use their position to dominate an industry to the detriment of the public or to combine with others to impose undue restrictions on trade they become subject to the provisions of the Combines Investigation Act, which is of general application against unlawful combinations and monopolies. Such remedies as are provided by Canadian law can, of course, be applied only against those who are subject to Canadian jurisdiction. Methods of dealing with conditions of detriment to the Canadian public caused by private restrictive arrangements involving foreign patents must, in large measure, be sought through intergovernmental collaboration as recommended below.

6. It is recommended that official government records be set up which would show from time to time any significant change in the degree of financial control which corporations outside Canada exercise over individual domestic companies. Statistics as to foreign investments in Canada are now gathered at varying intervals on a voluntary and confidential basis by the Dominion Bureau of Statistics. While the published summaries of such returns show the general trend and extent of capital movements they cannot provide, because of the limitations already mentioned, any clear indication of the nature of the control being exercised over individual Canadian companies or the particular interests involved. It would seem desirable that records which would provide this more complete information should be maintained and made available to interested government departments in order that there may be constant government scrutiny of the extent to which and the manner in which such control is being exercised and its effects on Canadian business and the Canadian public. Direct investments in Canadian undertakings by corporations outside Canada have often served to speed up industrial development and to make freely available for use in Canada the results of costly technological research in other countries. In many cases, however, the continued control by outside corporations has been found to impose severe limitations on the entrance of Canadian branch or affiliated companies into export markets and to make them subject, sometimes without their knowledge, to cartel arrangements made in other countries.

7. It is recommended that there be more adequate provision for the initiation of inquiries by the Combines Investigation Commission into restraints of trade and unfair trade practices. The coming of peace has made it imperative that there should be no development of private restrictive practices which would impede government policies to expand employment and production during the period of reconstruction. At the same time it must be recognized that the removal of the extensive direct government controls made necessary during the war may be regarded by some selfish or unthinking businessman as an opportunity for the establishment of private restrictions to eliminate competition. There must be effective enforcement of the Combines Investigation Act, which is designed to suppress undue restrictive practices by trade combinations or monopolies. In the administration of the Act in the future it will be necessary to engage to a greater extent than in the past in activities which will serve to prevent the development of undue restraints of trade as well as to take prompt action to prevent the continuation of such abuses. The successful development of preventive activities will require that necessary inquiries be initiated by the Commission without depending solely on the filing of statutory applications by the public, which ordinarily are not received until after the effects of a restrictive trade arrangement have become widespread.

8. It is recommended that steps be taken to build up an effective organization under the Combines Investigation Act to maintain much more comprehensive scrutiny of restrictive practices and developments than has heretofore been attempted. To do this it will be necessary to recruit and train an adequate staff and to provide appropriations sufficient to enable the organization to

function effectively. Such an organization should have the responsibility of securing at all times as full information as possible with respect to domestic and international trade combinations and monopolies and their effects on the producers and consumers of Canada.

9. It is recommended that public policy be carried forward in a number of directions to deal effectively with the varied conditions of industrial control. What is required is an integrated program to ensure that the possibilities in modern industrial efficiency are developed and stimulated to serve the public interest. Investigation, publicity, and prosecution have their parts to play but they cannot in every case serve as a solution to the problem of monopoly. Prosecution can be relied upon to remove restraints of trade only where it is possible and desirable to restore competition. In other circumstances different remedies must be applied. Canadian public policy with respect to combines has been established in existing legislation and judicial decisions. Further formulation of Canadian policy in regard to international cartels, presumably by the extension of similar principles, will enable representatives of this country to enter more readily into negotiations with those of other countries when pending international conferences are called. It has already been indicated that at the first favourable opportunity the United States will seek a measure of international agreement on policies for the control of cartels. The following might be considered in the further development and application of Canadian policy relating to both domestic and international practices in restraint of trade:

(*a*) The full utilization of Canadian legislative powers with respect to criminal law, including investigation, publicity and prosecution under the Combines Investigation Act, tariffs, import and export trade, taxation, patents, trade-marks, public ownership, including Crown companies and the disposal of war assets, and public regulation, in so far as such powers may be constitutionally applied. It cannot be overlooked that many of the restrictive practices which may be engaged in by international cartels will seldom be susceptible to effective action by any one country. Where world trade in a commodity is controlled by a cartel, tariff action may prove to have no effect on the division of markets among cartel members. Where foreign patent rights are so assigned as to prevent the export of Canadian products or to prevent importation into Canada the field of public action would be largely limited to intergovernmental negotiation.

(*b*) The making of representations to other countries the nationals of which are found on investigation to be engaging in restrictive practices which prejudice the Canadian public.

(*c*) Effective measures of international collaboration to check the abuses of cartelization.

10. It is recommended that the Government of Canada give its support to the establishment of an international office to deal with cartels, in connection with the Economic and Social Council of the United Nations. Close consideration should be given to other proposals for the international control of cartels which have been tentatively put forward by officials of the United States Government. As presently outlined these propose a measure of international agreement involving parallel national legislation to prohibit certain undesirable cartel practices, to provide for registration of cartel agreements and for the exchange of information between governments, and to establish more effective control over the use of patents and of corporate organization. It is not likely that there will be immediate general acceptance by all countries of the specific proposals put forward by the United States in view of differing national policies

with respect to cartels. But there is no doubt that the time has come for joint international action in this field. The establishment of an international office to further negotiations among nations and to assist in the establishment of accepted principles for the control of cartels through discussions and compromise would seem to be one of the essential first steps in dealing with the international cartel problems.

The foregoing recommendations are intended to indicate the broad lines along which public policy might be formulated and applied. If the proposed courses of action are accepted as a working basis there should be no delay in proceeding with the necessary preparatory measures. The problems of dealing with domestic trade combinations and international cartels will be continuing ones and will require the development of new measures of control, nationally and internationally, as economic conditions are more fully analysed and solutions devised.

APPENDIX

FORM OF LETTER REQUESTING INFORMATION FROM CANADIAN MANUFACTURING AND TRADING FIRMS

COMBINES INVESTIGATION COMMISSION
OTTAWA

490 Sussex Street,
November 18, 1944.

Study of Private International Trade Arrangements

Dear Sir—As was announced by the Minister of Labour at the last session of Parliament, inquiry is being made into the nature of international trade combinations and patent exchange arrangements which may affect Canada, in order to secure comprehensive information to serve as a basis for the formulation of sound public policy.

The nature of the survey, as the Minister indicated, is a study of the general aspects of private international trade arrangements dealing with trade practices and not a public inquiry or an investigation of particular trade practices. You will recognize the importance of the Government being fully informed as to the extent and nature of private international arrangements affecting Canadian industry and trade before formulating public policy or giving its approval or encouragement to proposals for international control of such arrangements. The subjects of the inquiry, quoted for your information from the Minister's letter of instructions, are the following:

> 'Study the nature and operations of international trade combinations in relation to Canadian interests and the measures which exist for their control. Such a study would include international patent arrangements. The committee should endeavour to find out to what extent policies followed by such trade combinations have affected employment or the operations of business enterprises in Canada or may affect them in the future. Attention should also be given to the effects of such arrangements on Canadian import and export trade and possible effects in the post-war period.
>
> Study the extent to which activities of such international trade combinations are affected by existing Canadian legislation and what further measures may be necessary to safeguard the public interest. In this phase of the study consideration should be given to the possibilities of international collaboration in the control of cartels.
>
> Study the relationships that may exist between international and domestic trade combinations, and make recommendations of necessary changes in existing legislation affecting combinations of either type.'

The Minister suggested that Dr. W. A. Mackintosh of the Department of Finance, Mr. J. J. Deutsch of the Department of External Affairs, Mr. J. C. McRuer, K.C. (now Mr. Justice McRuer of the Supreme Court of Ontario), and Professor V. W. Bladen of the University of Toronto be associated with the undersigned as Commissioner of the Combines Investigation Act in the conduct of the study. The study is proceeding under the joint direction of this group. Examination has already been made of material available in government depart-

ments and from other sources. We are now anxious to receive from industrial and trading firms who may have knowledge of cartel and patent arrangements whatever information they possess which would be of assistance in the inquiry. The purpose of this letter is to request you to furnish us with such detailed information as you may have regarding international cartel and similar arrangements applying to Canadian enterprises, including all arrangements for the pooling or exchange of patent or trademark rights, as they may affect your particular business or relate to fields of trade or industry in which you are engaged. This request is intended to include not only all arrangements based on formal contracts and agreements but any understandings or policies of an informal character which have restrictive aspects.

The following questions will indicate further the kind of information that is being sought:

(*a*) To what extent has your firm been directly or indirectly affected, during or prior to the War, by private restrictive arrangements on an international basis, with respect to:

1. Maintenance of prices;
2. Allocation of production, markets or sales quotas;
3. Export of Canadian products of your own or other manufacture;
4. Use of patented or secret processes or trademarks;
5. Types, varieties or grades of articles which are permitted to be produced and the restrictions placed upon their use;
6. Any other aspect of business or industrial activity.

(*b*) How long have these arrangements been in effect?

(*c*) How do these arrangements affect access to technological knowledge and development of research and experimentation in Canada?

(*d*) How do these arrangements affect the direction of Canadian export trade or the facility with which Canadian exporters can seek larger markets?

(*e*) How do these arrangements affect the purchase or use of products by Canadian users, whether industrial or other?

We suggest that each instance of restriction or limitation affecting your company or any subsidiary, either as seller or purchaser, should be fully described so that the nature of the arrangement will be as clearly outlined as your records or experience permit. This should include arrangements to which Canadian subsidiaries of British or foreign parent companies may not themselves be parties, but which may affect their position through the policy of the parent firm. It should include any limitations of the types mentioned in (*a*) above imposed on a Canadian subsidiary by the parent company.

May we refer you again to the three paragraphs quoted above from the Minister's letter and request you to let us have your considered opinion as to the effect of such international arrangements on employment in Canada and on Canadian import and export trade, in the past and in the post-war period; also as to the legislative or other measures which should be considered in order to safeguard the Canadian public from any undesirable effects of international cartels, patent exchange arrangements or domestic trade combinations. It would be appreciated if you would write fully in reply to this request and would arrange to have the information in our hands at the earliest possible date and, in any event, not later than the middle of December.

Yours faithfully,

F. A. McGregor
Commissioner.